```
   1 ATGGTGCTCT CCCAGGAGGA GCCGGACTCC GCGCGGGGCA CGAGCGAGGC
  51 GCAGCCGCTC GGCCCCGCGC CCACGGGGGC CGCTCCGCCG CCCGGCCCGG
 101 GACCCTCGGA CAGCCCCGAG GCGGCTGTCG AGAAGGTGGA GGTGGAGCTG
 151 GCGGGGCCGG CGACCGCGGA GCCCCATGAG CCCCCCGAAC CCCCCGAGGG
 201 CGGCTGGGGC TGGCTGGTGA TGCTGGCGGC CATGTGGTGC AACGGGTCGG
 251 TGTTCGGCAT CCAGAACGCT TGCGGGGTGC TCTTCGTGTC CATGCTGGAA
 301 ACCTTCGGCT CCAAAGACGA TGACAAGATG GTCTTTAAGA CAGCAGCATG
 351 GGTAGGTTCT CTCTCCATGG GGATGATTTT CTTTTGCTGC CCAATAGTCA
 401 GCGTCTTCAC AGACCTATTT GGTTGTCGGA AAACAGCTGT CGTGGGTGCT
 451 GCTGTTGGAT TTGTTGGGCT CATGTCCAGT TCTTTTGTAA GTTCCATCGA
 501 GCCTCTGTAC CTTACCTATG GAATCATATT TGCCTGCGGC TGCTCCTTTG
 551 CATACCAGCC TTCATTGGTC ATTTTGGGAC ACTATTTCAA GAAGCGCCTT
 601 GGACTGGTGA ATGGCATTGT CACTGCTGGC AGCAGTGTCT TCACAATCCT
 651 GCTGCCTTTG CTCTTAAGGG TTCTGATTGA CAGCGTGGGC CTCTTTTACA
 701 CATTGAGGGT GCTCTGCATC TTCATGTTTG TTCTCTTTCT GGCTGGCTTT
 751 ACTTACCGAC CTCTTGCTAC CAGTACCAAA GATAAAGAGA GTGGAGGTAG
 801 CGGATCCTCC CTCTTTTCCA GGAAAAAGTT CAGTCCTCCA AAAAAAATTT
 851 TCAATTTTGC CATCTTCAAG GTGACAGCTT ATGCAGTGTG GGCAGTTGGA
 901 ATACCACTTG CACTTTTTGG ATACTTTGTG CCTTATGTTC ACTTGATGAA
 951 ACATGTAAAT GAAAGATTTC AAGATGAAAA AAATAAAGAG GTTGTTCTCA
1001 TGTGCATTGG CGTCACTTCA GGAGTTGGAC GACTGCTCTT TGGCCGGATT
1051 GCAGATTATG TGCCTGGTGT GAAGAAGGTT TATCTACAGG TACTCTCCTT
1101 TTTCTTCATT GGTCTGATGT CCATGATGAT TCCTCTGTGT AGCATCTTTG
1151 GGGCCCTCAT TGCTGTGTGC CTCATCATGG GTCTCTTCGA TGGATGCTTC
1201 ATTTCCATTA TGGCTCCCAT AGCCTTTGAG TTAGTTGGTG CCCAGGATGT
1251 CTCCCAAGCA ATTGGATTTC TGCTCGGATT CATGTCTATA CCCATGACTG
1301 TTGGCCCACC CATTGCAGGG TTACTTCGTG ACAAACTGGG CTCCTATGAT
1351 GTGGCATTCT ACCTCGCTGG AGTCCCTCCC CTTATTGGAG GTGCTGTGCT
1401 TTGTTTTATC CCGTGGATCC ATAGTAAGAA GCAAAGAGAG ATCAGTAAAA
1451 CCACTGGAAA AGAAAGATG GAGAAAATGT TGGAAAACCA GAACTCTCTG
1501 CTGTCAAGTT CATCTGGAAT GTTCAAGAAA GAATCTGACT CTATTATTTA
1551 A   (SEQ ID NO: 1)
```

FEATURES:
Start Codon: 1
Stop Codon: 1549

FIGURE 1A

HOMOLOGOUS PROTEINS:
Top BLAST Hits:
Top 10 BLAST Hits:

Sequences producing significant alignments:	Score (bits)	E value
CRA|62000057354769 /altid=gi|14090278 /def=dbj|BAB55595.1| (AB0...	874	0.0
CRA|18000004921871 /altid=gi|5730045 /def=ref|NP_006508.1| (NM_...	527	e-148
CRA|18000004921870 /altid=gi|7513431 /def=pir||I38495 X-linked ...	527	e-148
CRA|18000005134802 /altid=gi|6677997 /def=ref|NP_033223.1| (NM_...	516	e-144
CRA|163000000492387 /altid=gi|8923981 /def=ref|NP_061063.1| (NM...	402	e-110
CRA|224000009228679 /altid=gi|17389922 /def=gb|AAH17968.1|AAH17...	399	e-109
CRA|89000000201355 /altid=gi|7299667 /def=gb|AAF54851.1| (AE003...	353	1e-95
CRA|224000007378350 /altid=gi|16768034 /def=gb|AAL28236.1| (AY0...	353	1e-95
CRA|18000005086356 /altid=gi|7449989 /def=pir||JC5507 monocarbo...	189	2e-46
CRA|18000005075554 /altid=gi|6226943 /def=sp|Q90632|MOT3_CHICK ...	188	4e-46

EST:

CRA Number	gi Number	Score	Expect
CRA|76000044050113	gi|14568965	1265 bits (638)	0.0
CRA|1000600799987	gi|6359768	1170 bits (590)	0.0
CRA|160000129712648	gi|13709362	1063 bits (536)	0.0
CRA|58000099006260	gi|12788094	1049 bits (529)	0.0
CRA|32000087643803	gi|10813242	1017 bits (513)	0.0
CRA|157000141043600	gi|13460082	973 bits (491)	0.0
CRA|160000129843301	gi|13720697	902 bits (455)	0.0
CRA|105000016327758	gi|11084182	680 bits (343)	0.0
CRA|330000005235303	gi|6989741	551 bits (278)	1e-154
CRA|3000001439560	gi|1166011	547 bits (276)	1e-153
CRA|1000684940123	gi|6569405	486 bits (245)	1e-134
CRA|1000610791502	gi|5933739	486 bits (245)	1e-134
CRA|3000001441088	gi|1164256	462 bits (233)	1e-127
CRA|160000129872523	gi|13723263	410 bits (207)	1e-112
CRA|162000043366421	gi|10877364	234 bits (118)	8e-59
CRA|3000000874607	gi|2994619	218 bits (110)	5e-54
CRA|225000013398008	gi|18086759	208 bits (105)	4e-51

EXPRESSION INFORMATION FOR MODULATORY USE:
library source:

gi Number	Organ	Tissue Type
gi|14568965	lung	small cell carcinoma
gi|6359768	(none)	liver
gi|13709362	(none)	(none)
gi|12788094	brain	neuroblastoma cells
gi|10813242	(none)	pooled germ cell tumors
gi|13460082	prostate	adenocarcinoma
gi|13720697	(none)	(none)
gi|11084182	ovary	fibrotheoma
gi|6989741	(none)	(none)
gi|1166011	placenta	(none)
gi|6569405	(none)	pooled germ cell tumors
gi|5933739	thymus, pooled	(none)
gi|1164256	placenta	(none)
gi|13723263	(none)	(none)
gi|10877364	colon	(none)
gi|2994619	pooled	(none)
gi|18086759	pancreas	Islets of Langerhans

FIGURE 1B

```
  1 MVLSQEEPDS ARGTSEAQPL GPAPTGAAPP PGPGPSDSPE AAVEKVEVEL
 51 AGPATAEPHE PPEPPEGGWG WLVMLAAMWC NGSVFGIQNA CGVLFVSMLE
101 TFGSKDDDKM VFKTAAWWGS LSMGMIFFCC PIVSVFTDLF GCRKTAVVGA
151 AVGFVGLMSS SFVSSIEPLY LTYGIIFACG CSFAYQPSLV ILGHYFKKRL
201 GLVNGIVTAG SSVFTILLPL LLRVLIDSVG LFYTLRVLCI FMFVLFLAGF
251 TYRPLATSTK DKESGGSGSS LFSRKKFSPP KKIFNFAIFK VTAYAWWAVG
301 IPLALFGYFV PYVHLMKHVN ERFQDEKNKE WLMCIGVTS GVGRLLFGRI
351 ADYVPGVKKV YLQVLSFFFI GLMSMMIPLC SIFGALIAVC LIMGLFDGCF
401 ISIMAPIAFE LVGAQDVSQA IGFLLGFMSI PMTVGPPIAG LLRDKLGSYD
451 VAFYLAGVPP LIGGAVLCFI PWIHSKKQRE ISKTTGKEKM EKMLENQNSL
501 LSSSSGMFKK ESDSII (SEQ ID NO: 2)
```

FEATURES:
Functional domains and key regions:
PDOC00001 PS00001 ASN_GLYCOSYLATION
N-glycosylation site
       81-84   NGSV

PDOC00002 PS00002 GLYCOSAMINOGLYCAN
Glycosaminoglycan attachment site
       340-343 SGVG

PDOC00004 PS00004 CAMP_PHOSPHO_SITE
cAMP- and cGMP-dependent protein kinase phosphorylation site
Number of matches: 2
    1   275-278 KKFS
    2   509-512 KKES

PDOC00005 PS00005 PKC_PHOSPHO_SITE
Protein kinase C phosphorylation site
Number of matches: 7
    1   10-12   SAR
    2   234-236 TLR
    3   251-253 TYR
    4   258-260 STK
    5   273-275 SRK
    6   475-477 SKK
    7   485-487 TGK

PDOC00006 PS00006 CK2_PHOSPHO_SITE
Casein kinase II phosphorylation site
Number of matches: 6
    1   4-7   SQEE
    2   97-100   SMLE
    3   104-107 SKDD
    4   164-167 SSIE
    5   258-261 STKD
    6   485-488 TGKE

PDOC00008 PS00008 MYRISTYL
N-myristoylation site
Number of matches: 15
    1   13-18   GTSEAQ
    2   82-87   GSVFGI
    3   141-146 GCRKTA
    4   149-154 GAAVGF
    5   156-161 GLMSSS
    6   174-179 GIIFAC
    7   180-185 GCSFAY
    8   201-206 GLVNGI
    9   230-235 GLFYTL
    10   265-270 GGSGSS
    11   300-305 GIPLAL
    12   337-342 GVTSGV
    13   384-389 GALIAV
    14   394-399 GLFDGC
    15   464-469 GAVLCF

FIGURE 2A

PDOC00013 PS00013 PROKAR_LIPOPROTEIN
Prokaryotic membrane lipoprotein lipid attachment site
169-179 LYLTYGIIFAC

PDOC00029 PS00029 LEUCINE_ZIPPER
Leucine zipper pattern
365-386 LSFFFIGLMSMMIPLCSIFGAL

PDOC00240 PS00267 TACHYKININ
Tachykinin family signature
Number of matches: 2
1   154-158 FVGLM
2   369-373 FIGLM

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainity
1	67	87	1.683	Certain
2	117	137	2.220	Certain
3	146	166	1.923	Certain
4	169	189	1.494	Certain
5	202	222	1.761	Certain
6	232	252	1.893	Certain
7	291	311	1.874	Certain
8	330	350	0.801	Putative
9	364	384	2.458	Certain
10	387	407	1.707	Certain
11	419	439	1.966	Certain
12	453	473	1.826	Certain

BLAST Alignment to Top Hit:
>CRA|62000057354769 /altid=gi|14090278 /def=dbj|BAB55595.1| (AB047324)
        TAT1 [Rattus norvegicus] /org=Rattus norvegicus
        /taxon=10116 /div=ROD /dataset=nraa /length=514
        Length = 514

 Score = 874 bits (2233), Expect = 0.0
 Identities = 435/517 (84%), Positives = 463/517 (89%), Gaps = 1/517 (0%)
 Frame = +1

Query: 232 MVLSQEEPDSA-RGTSEAQPLGPAPTGAAPPPGPGPSDSPEAAVEKVEVELAGPATAEPH 408
            MV S EEP +A R T+EAQP GPAP+ AP P PGPSD + +VEKVEVEL   +
Sbjct: 1   MVPSLEEPAAAERETNEAQPPGPAPSDDAPLPVPGPSDVSDGSVEKVEVELT--RSTGNQ 58

Query: 409 EPPEPPEGGWGWLVMLAAMWCNGSVFGIQNACGVLFVSMLETFGSKDDDKMVFKTAAWVG 588
            EPPEPPEGGWGWLVMLAAMWCNGSVFGIQNA GVLFVSMLETFG+KDDD M FK AAWVG
Sbjct: 59   EPPEPPEGGWGWLVMLAAMWCNGSVFGIQNAYGVLFVSMLETFGAKDDDNMAFK-AAWVG 117

Query: 589 SLSMGMIFFCCPIVSVFTDLFGCRKTAVVGAAVGFVGLMSSSFVSSIEPLYLTYGIIFAC 768
            SLSMGMIFFCCPIVSVFTD+FGCR+TAV+GAAVGFVGLMSSSFVSSIEPLY TYG++FAC
Sbjct: 118 SLSMGMIFFCCPIVSVFTDMFGCRRTAVLGAAVGFVGLMSSSFVSSIEPLYFTYGVVFAC 177

Query: 769 GCSFAYQPSLVILGHYFKKRLGLVNGIVTAGSSVFTILLPLLLRVLIDSVGLFYTLRVLC 948
            GCSFAYQPSLVILGHYFKKRLGLVNGIVTAGSSVFTILLPLLL L +VGL YTLR+LC
Sbjct: 178 GCSFAYQPSLVILGHYFKKRLGLVNGIVTAGSSVFTILLPLLLGNLTSTVGLCYTLRILC 237

Query: 949 IFMFVLFLAGFTYRPLATSTKDKESGGSGSSLFSRKKFSPPKKIFNFAIFKVTAYAVWAV 1128
            IFMFVLFLAGFTYRPL S+K+KES S SS FSR+K SPPKKIFNFA+FK TAYAVWA
Sbjct: 238 IFMFVLFLAGFTYRPLVPSSKEKESEDSRSSFFSRRKLSPPKKIFNFALFKETAYAVWAA 297

Query: 1129 GIPLALFGYFVPYVHLMKHVNERFQDEKNKEVVLMCIGVTSGVGRLLFGRIADYVPGVKK 1308
            GIPLALFGYFVPYVHLM HV ERF+D NKEV+ MCIGVTSGVGRLLFGRIADY+PGVKK
Sbjct: 298 GIPLALFGYFVPYVHLMNHVKERFKDVNNKEVLFMCIGVTSGVGRLLFGRIADYLPGVKK 357

Query: 1309 VYLQVLSFFFIGLMSMMIPLCSIFGALIAVCLIMGLFDGCFISIMAPIAFELVGAQDVSQ 1488
            VYLQVLSFFFIGL SMMIPLCS+FGALIA+CLIMGLFDGCFISIMAPIAFELVG QD SQ

FIGURE 2B

```
Sbjct: 358  VYLQVLSFFFIGLTSMMIPLCSVFGALIALCLIMGLFDGCFISIMAPIAFELVGPQDASQ 417

Query: 1489 AIGFLLGFMSIPMTVGPPIAGLLRDKLGSYDVAFYLAGVPPLIGGAVLCFIPWIHSKKQR 1668
            AIGFLLGFMSIPMTVGPP+AGLL DKLGSYD+AFYLAG+PP IGGAVLC IPWIHSKKQR
Sbjct: 418  AIGFLLGFMSIPMTVGPPVAGLLHDKLGSYDLAFYLAGIPPFIGGAVLCLIPWIHSKKQR 477

Query: 1669 EISKTTGKEKMEKMLENQNSLLSSSSGMFKKESDSII 1779
            EISK TG EKMEKML NQ+SLLSSSSG+FKKESDSII
Sbjct: 478  EISKNTGGEKMEKMLANQSSLLSSSSGIFKKESDSII 514 (SEQ ID NO : 4)
```

Hmmer search results (Pfam):

Model	Description	Score	E-value	N
PF00664	ABC transporter transmembrane region.	4.2	7.1	1
PF01027	Uncharacterized protein family	3.4	7.6	1
PF00083	Sugar (and other) transporter	2.0	7.4	1

Parsed for domains:

Model	Domain	seq-f	seq-t		hmm-f	hmm-t		score	E-value
PF00083	1/1	11	50	..	184	223	..	2.0	7.4
PF01027	1/1	121	177	..	1	59	[.	3.4	7.6
PF00664	1/1	165	232	..	1	76	[.	4.2	7.1

FIGURE 2C

```
   1 AATGGGTATT TTGTAGACTG TCCTTGATTG GGATTTGTCT AATGTTTTTC
  51 TGATGGTTAG CCAGGGATTA TGGGTTTTGG CAGGAAGACC ACAGAGGTAA
 101 AGTACCATTT TCATCACATC ATATCGGGGA TACATTATCA TCTAGTTGAG
 151 GTACTGTGTG CCATTTTTTG CACCCTAAAG TTATTTCTTC CCCCCACTCC
 201 CCCTTTCCAT CCTATACTCT TTGGAAGAAA GTTACTACGC ATACCCACAC
 251 TTAAAGAGTA AACCATTGTA CTTCACCTCC ATGAGGGAGG GAGTATGTTC
 301 ATAAAGTATT TACATTTCCT GCAGGAGAGA TTTGTCTATT CTCTCCTCAT
 351 TATTTATTTA ATCATTTACT TACATCAGTA CTGACTCGTG GATAATTCTT
 401 ACATATGTGT TTGTTTGTGT GCATGCAAAT ATATAATCGA TGTGCTTTCT
 451 TTGCCCAATA ATATGTTGTG GACAACTTTC AAAGTCAATA AATACAGATG
 501 ACCTTCAGAA CTTTTAGAGG TTTTAAAGTA AGTATCTAAT CAGTCTTCTA
 551 CCAATGTACA TTATACTTCC AAATTTTCCT TATTTCCAAC AATACTGGGG
 601 TATCATCTTC ATACATACAT TTTTGTGCAC TTATGTGCCT ATTCCTTTGT
 651 TTACTATTTT ACCCTCATTT CTAAGGCAGA TTACACTTGA GCTATGTTCC
 701 CCATTCCACA ACCAAGCACG GCTTGCTTTC CTTAGTTTAT GCTATTTTCT
 751 CTACCTGGAA TGCTCTTTTC CTGTCTTGAC CCACTGAAGT CGTATGTATG
 801 AATCAGGGCT TCGGCCAAAG GCTGTTTGCT GTAGAGGCTC TTCTACAGTG
 851 TTTGGAGAGA ATTTAAGGGA CTATCTCATC TCTCTCTTTT GTACATGTAT
 901 TATAACACAT CATCTGAGCC TCCTAGTCTC TCCCAGGACT CTTTTTTCCT
 951 ACCAGTTTAT CAACTGATAA GAGGCAGAAA CGAGATCAAT CGCACTCATC
1001 TGTGTACTCT ATCACAGTGG TGGGCACATC AAGTAACTAG CATATTTTGA
1051 CTTTGATTGA AGTGAAGAAT ACGAATAACA GAAATTAAGA AGCATCCTCA
1101 ATATTGCATA GCAGGTTACT CTTCTTTTCT TTTACATAGG ATGGCACTCC
1151 ATGCTTCAGG GAGACAGAGG AGTTGAATAC AGGTTTTAGT TTTTGTTTAA
1201 AGTGAAAACG ACTCTGATGT AGTTGAAAAG TAATGCTTTC TAGCTGTCTG
1251 TTAAAAATGT TTGTTGGTTG AAGACTTCGG AATTGCAGTC CAGTGAGGAC
1301 TGAAAATAAG CATCTTTGGT GTGCCAAATA TTCATAAGGA AATTGTATAC
1351 GAATGCAAGA GAATGGAACT GAAGTAATAA AATAAGGGCT CTGATCCTTC
1401 AGATGACTTA TTTAAGAAGC CAGGTGGCAT AACGAATCTT ACATATTATA
1451 ATTAGTACTG AGAGGTGAAT GCCAAAACAT AAAACAAACA CAATCGAGAC
1501 AATGTTAGTG TGACTGTGAC GCTGTGTCGG TGAGTTGAGG CTAACGATCC
1551 AGTGTGGCTC TCCTGAAGGC CCACCGCGCC CGCACCTAGG AGACGCGCCC
1601 CTTCTGCTCA TGCTTTGAGG CGGGGTGACC CACACATCTG TGCCCCTCTC
1651 TGAGCAGGAG GAGGCCCCGT CGCAGACGCG CGGCGCAGACA GCGTCTGCCG
1701 CGGGCACCTG GGGCCGCGCG CCGCGGGGCG CCCCGCCTCC GCTCTCCGAG
1751 GCCCAATCAT CTGGAGGCTG TGGGGGCACG TCCCGCTCCC GGCCACGCCC
1801 CCAGCCGGCG GGGCGGGGGG TGCTTTTAAG AACCGGCGGC TGGCAGTGGG
1851 CTCAGTCGGG GGTGCGGGGC TGTGACCTAG AGGCTTCAGT GTCGATCCCC
1901 GAGGTGTTCG CGCGCGCCAG CTGTCCTCGC GGCCGGCCTGG GCGCTGGCCG
1951 CCTGCGCGCT GCCAGCCCGC CCGCCGCCA GGGGCTCCGC CGCCCTCGCC
2001 TCGGCCTCGT TAGCCCGCCA GGAGCCCCGC AGCTCCTCCG GGAGCCCGCT
2051 GGTAACTCGC GTCCCTCGCG CTTCTCCGGC GCCTGAGGGG CCCGCCTCGG
2101 GCCATGGTGC TCTCCCAGGA GGAGCCGGAC TCCGCGCGGG GCACGAGCGA
2151 GGCGCAGCCG CTCGGCCCCG CGCCCACGGG GGCCGCTCCG CCGCCCGGCC
2201 CGGGACCCTC GGACAGCCCC GAGGCGGCTG TCGAGAAGGT GGAGGTGGAG
2251 CTGGCGGGGC CGGCGACCGC GGAGCCCCAT GAGCCCCCCG AACCCCCCGA
2301 GGGCGGCTGG GGCTGGCTGG TGATGCTGGC GGCCATGTGG TGCAACGGGT
2351 CGGTGTTCGG CATCCAGAAC GCTTGCGGGG TGCTCTTCGT GTCCATGCTG
2401 GAAACCTTCG GCTCCAAAGA CGATGACAAG ATGGTCTTTA AGACAGGTGA
2451 GGCGCGGCGC CCGCCGAGGC CAGCCTGGGC GACCCGCGTG GGGCCCCCGA
2501 GCGCATCCCG CGTGTGTGGCT GTGTCTGCCT CCGAGTGTGC ATGTCGGTGG
2551 GTCCCTGTGC CAGAGGGTGC GAGCAGGGGG GTCTTTCGAG TTGCAGACAG
2601 AGCCTGCCGC TTCTGGGGCC TCGGGGTGCC CGTCTTTATA TGGAATCCAG
2651 CTGCAGAGCT GTGTGTTTGC AAGCAGGTCG CAGAACTTAC TTGCCGAGAT
2701 CGTCCTCCTT TCCCCTCAGC AGAGCAGACG CTAACAGTCC ACAGGAGCCC
2751 TTCCTTTTAT TGTTTGAAAA CAAACAGAAC CCCAGAACCT TCAACCCCAG
2801 TCATCGCCCT GTCATTTTTG TGGTCTCTTT CGTGACTATG CCAGTTATGT
2851 AGTTCTTCAC CTGCCTCCCT GGGCCGCAGA GGGGTGTGCG TATGTTGGCG
2901 GGGCGGGGGG TGGAGTTTGG AGGAATGAAA GAGATTTGTA CGAAGGTCAC
2951 TGGAGTTCCA AAGGGGGCCC TGCAAGAGTC ACGGTTCCGT GCGTTCCGT
3001 CCCCCGCCT TTTTTTGCCC TCTGGGTTAA ATGTAGAAAA CACGGGAGGC
3051 AGCCGGATTA GGGACTAGGA TGAGGAAGGT GAAGGGTTGC TTCTTCCCTC
3101 TTCCTGTTGT GTTTTTTGAC ATTTTTTTTT AACCATATAG TAAATTAGAT
3151 ACAAAAGGTG CAGATTCAGC GTTTTCTCCC TGTAGAGCAT TATTATGACT
3201 TTTTGGCTGG TTAGGCAAAA AACAAATCTA AGACCTTCTG CATGACACTT
3251 TAACATAAAT TCTTTCACTT TATCCTGCAA GGTGAGCGCG GTCAACCCCA
3301 TTTGGGTGAG AAAACTGTAG CTCAGTGAAA GTGTCTTGGT GGGTAGTAGA
3351 ATGGCAATAA AACACATATC AACTGACTTC AAGGGCTAAG TGATTTCCAT
```

FIGURE 3-1

```
3401 TACTAAATCA ACCTCCCTCC CCATCATTTG GGGTAACTTT ATATGATTAA
3451 TAGTCTTTTT TTTTAACCTT GATTTTCTAT TATTTTTAGA GTGAATATTT
3501 CTTAGGTCTT TAGTATGCAT ATGAGGAATG GGCAAGACTG TAATAAATTC
3551 TGAGACAAAG GTAATGCTGA GTTATGCTGA GAGTTTTAAA ACCTGACATA
3601 AATACTATTA AACTATTTGT ATCATTCTGC AACTTACTTT TCTTCCATTC
3651 CGGCATCATGT TTGTGACTTA TCCACATAAT ACCTCAGTGT GAACTGATAA
3701 CTCAAATTCT TTCCATTTTA ACTTAGGTGG TTTGCATTGT TTGACTATAT
3751 TATACTCTAT GCATTCTCCC TCTGATGGGC ATTTAGATTG CTTCCAAACT
3801 CATTCTAAAC AATGCTGCAA TGAATATTCT TGTACACTCT CGTTATGCAT
3851 GTGAATACGG TACCATTTTA ACCTGGAATT TCTGTTCTTT AAATAGCTAT
3901 TGAAACTGCT GTGGTATGCG GGTCAATGGG CTAGGTACAA AAAGTGTTAA
3951 AAATGTAGTA ACATATCCTT ACCATTTAAG GGAAGTAATC ATTGTAAAGT
4001 TTAGCAGGGG AGATATGCAT ATATAATAGC AAACAAAAAT AGTTTGTTGT
4051 CTTTTCTATA TGAGTATTGG GTGTCAGAGA GAAAAGCCCC AAAAGAAGGC
4101 AGAATTGACA GAGTTAACAT TTAAAGACTA GTTCCAACAT TTACCATATT
4151 CCTGCCTGGG ATTACAGATT TTTTAATGCA GTCAAGATAA CAGCAGTCTT
4201 TTGTTTATCA TTGTTTTTGC AAATTCAGTT AAGTAGATCC TTTGGTGTCT
4251 GTGGGTGGGT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTGAG
4301 AGAGAGAGAG AGCAATTGCC AGAGAGACCA TAGCTTTGCC AGGGATGAGA
4351 ATTTTGCAGT GTCAAAGTCT CTACCTACTA CTTGTCCCCA AAGTTCTAAT
4401 TGGCTACACA ATATCCCAAT ACTGGGTAGC TGAGAGTGAG GGAAGGAACC
4451 TGGTTTTTCT TTTGCACTCT GTGGAACTTT GTGTTTTCCA TTTTGATGAA
4501 TATCTTTTTT CTTTTTACTC AGTTCAGTCT TTGACAACTT TTTCAGTCAT
4551 GTTTGTGTAT GTGTGGGTAT ATATCATATA AACAGTTGCA CAGGTGTGCT
4601 AGTTAAATGT GTGAAGATCT TTGTGTTTCT CTGCCTGACT GCTGTATATC
4651 TATTTATGGT TGTGCCATTG CACAAGGGTG CCCAACTCAG GGGTAAGTGG
4701 GGACTGAAAA CCAGCCTGGG CTCTGGGTGC CCTTTGTCTG ATTCCTACAG
4751 AAGGGCCCTA TGCACTTGTA ATGGCCCTGT ATAACACAGC ATCTAGATTG
4801 AACAATGGCC ATTACTTGGG TGCTAGGTAA TACATATATG ACTGATAGAT
4851 GTTAAGGGCT GAGGAAGAAA ACAGATTTAA ACTTAGTGCT GAAAAAATGG
4901 TTACAAGATA GTCTTTAAGC CAGTTATTGT TGAGATCTCT CTCTCTTCCC
4951 CTGTCCCCTA CCCCTTTCTC TTTCCTTCAG TGCACACACA CACACACAAA
5001 GGTGTTTCAT GAAGTCCCTC ATCTACCACA GTCACTGTTA TTTGAGAATA
5051 TCTGCTTTGA AGTTTGATTG GTCACACTTT TTCACTTTGA TATTCGAATG
5101 CTGAGTCGTC TGTGATCAAG CATATGCAAG CTTCAAATAC ATGCCAAAAA
5151 ATATCTGGAA TTTGTTTAAG CCTTTTATTT TTCAAAGTTT TGGTCTATTT
5201 TCTATTACCG TACTCATGAT GGATAATCCT GGTGTTAGAG TACAGCTAGT
5251 TCTGTCTCCT TGTTTCCATT ACTTCTTTAT AGCAAGTGAC TAGCCTAAGG
5301 ATATACAGGG AGGTGGTGGT GGAATGGAAT CTAGGTCTCC AAATGATGGT
5351 GCGCATTTCT TGAGTACTTT CCTGTGGCTA AGCACTTTAG ATGCGTTCCT
5401 ATTTAAACCT TACCACGATT CTCTGATAGA CTTTGTTAAT ATCTTTCTTT
5451 TCAGATATGG GAACTCAGGC TTACAGAGTT TAAGTAAGAA GTGGAGCCAG
5501 AATTCAACCC CAGGCTTATC TGACTCTAAG AGCTGGGATT TTTATTTTAA
5551 TTATTTATTT ATTTAAAATA TGGAATGCTT CATGAATTTG CATGTCATCC
5601 TTGTTCAGGG GTCACGGCTAA TCTTCTCTGT GTCATTCCAA TTTTAGTAGA
5651 TTGTTGTTCA AAGTGCTGCT GAAGCAAGCA CCAGGAGCTG GGTTTTAATC
5701 ATTCATCATA TTGCATTGAC TAGATAACAT TCTGCAAATA CGATGTTTTT
5751 TATGTTGTTG ATTAATTTAA GTGTTAGTGA TTGGTTGAGT GCTCTACCAT
5801 GCATTCTGGG ATTAGAAAGA AGGGTCCCTG TTTCTTGGTC CTACTTTGTG
5851 GTGAATAAAC AATTGCAAAT TATTAATGTC TCAAACTATA TTTCTGAAGT
5901 GTAGAGAGAC TTCCATAGAA GAACAAGATA CTTCCATATG CCGTTCAAGC
5951 AAAAGTCTGG GGTTTCCTTT GAAGAACTTT TAGATTGATC CACAGCAGGA
6001 CAATGTTTCT AGGCAGAACT GAGGAGGAGC CTTTCTTAGG CTCACTTCTC
6051 TTCAGGGCTC TGTTAACTCT TCCCACGCAA TGGATAATCT ACCCAAAATT
6101 TCTCAGGAAA GGGCCTGAAG AAGTTCATTC ACACTAAGGT GTAAGTGAGT
6151 TTACACATCT TACTGTTAAT TCTCTTTATA CAAATGTTTA CCAAGTTATC
6201 TAACACGCTT TGTTTTGGGC TCTGTCCTGG GGACTGGAGA TAATGACTGA
6251 GAGAGAAAAT GTCAGCTGTT TCAAAGTAGC TTAGGATCTG TTGTGGGATA
6301 CAAATTAATA ACAGACCAGA AGTAATAGAA TATTTCCCTG AAGGATTTTC
6351 AATATAACAG GACTCAGTTT TACTATAAAA GGCTGAAATT CTAAGGTCAT
6401 TTCAACAGGT GGTGGGGTTG GGGGTGGGGA AGGCATTTGA CGGCCTCTTTC
6451 TCTATGGTTA TAAATCTCAC TTGGTGAAAT TAAGACTTTG GAAAGGGGAA
6501 GTAAGCCAAC TCCAAGTTGG GCAGTAGAAC CAATGAAAAA TGCTGACGGC
6551 ATCACAGTCC CATTATGGTG CCCAGCTGCC AATGACATGG CACTCAGAGG
6601 AGTGTCTCAC ACATACTGCT CTGTCTGAGG GAGCAAGCTA AGCTTGAGTT
6651 GTCTCTTTTT TTGTTGTTTT TTTTTTTTTT TTTTTTTTGA GACAGATTCT
6701 CACTCTGTCG CCCAGGCTGG AGTGCAGTGG CACCATCTCG GCTCACTGCA
6751 ACCACTGCCT CCCGGATGCA AGCAATTCTG CCTCAGCCTT CCGAGTAGCT
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FIGURE 3-2

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6801  GGACTACCTG  CGCTTGCCAC  CACACCTGGC  TAATTTTTGT  ATTTTTAGTA
6851  GAGACAGGGT  TTCACCATAT  TGGCCAGGCT  GGTCTCAAAC  TCCTGACCTC
6901  GTGATCCACC  TGCCTCGGCT  TCCCAAAGTG  CTGGGATTAC  AGGCATAAGC
6951  CACCGCGCCT  GGCCAAGTTG  TCTCTTTTTA  GTTGAATTTT  TACCTGTTCA
7001  CATGTGTATT  CTTCTTGCCT  AGGTAGAGAG  GAATCAGACA  CTCTGGGGAA
7051  GAATACAAAG  AAATACAATT  AAGTGGAACA  TTGTTTTTCT  TTAGAAAGTG
7101  CAATTTTGGG  CTGGGCGCAG  TGGCTCATGC  CTGTAATCCC  AGCCCTTTGG
7151  GAGGCCAAGG  CAGGTGGATC  ACCTGAGGTC  AGGAGTTTGA  GACCAGCCTG
7201  GCCAAGATGG  TGAAACCCCG  TTTCTACTAA  AAATACAAAA  AATTAGCTGG
7251  GCATGGTGGC  GGATGCGTGT  AATCCCAGCT  ATTCGGGAGG  CTGAGGCAGG
7301  AGAATTGCTT  GAACCTGGGA  GGCAGAGGTT  GTAGTGAGCC  AAGATGGCGC
7351  CACTGTACTC  CAGCATGGGC  AACAAGAGTG  AAACTCCGTC  TCAAAAAAAA
7401  AAAAAGAAA  AGAAAAAAG  AAAAAGAAA  GAGCAACTTT  GTTTTAACTC
7451  TGCTAGATAC  TGGAAAACCC  ATGGAACTAA  TGAAGAGCCT  AGGGCTTTTT
7501  ATTTGTTTTG  AGATTGTGCC  ATTTCACTCC  AGCCTGGGCA  ACAAGAGAGA
7551  AACTTTGTCT  CACACACAAA  AAAGTGTAA  ATCAAAACAT  TAAAAATTAA
7601  GTAGTTTGGA  AGTAGATTAT  CAAAAAGGTC  CTGAAAGGGA  GGTTCTTTGG
7651  CTATAATCTT  TAACGCAACT  CTACACTCCC  TGTATGGAGA  CAGATTTCTT
7701  TTTAGATGGT  TACAGTCACA  AAGTAGGGTT  TTCAGTAGCA  TTTAGGGATG
7751  AATGAATCTT  GCAGCACCTC  TCCATGTATC  TTGCTAGCCC  CTCTGAAACT
7801  TCAGGTCAGT  TAGTGCTTCC  TCAGAAATTG  TTCCCCCCAC  ACCAAGTTTT
7851  CACATTTACA  GTTATACTGA  TATCCACATT  GTACTGTTGT  ATGTGACACC
7901  TAGATTATAG  GAAATTTTGG  CTATAGTTCA  GAAATTAACT  GCTATGTTTT
7951  GCCTTTACGC  TAAAGAGATT  TTGTTTTGTT  TAGTAGGAAA  AGCGGCCTGC
8001  ATAACTAGCC  ATTTCTGTAT  CTTAGAAAAA  TTTTTAGTAA  CAGTCCTTTG
8051  TTGAGCTAGT  TACAGTGAAC  AAATAATCTG  GTTCATGGTC  CTATACATCT
8101  TTCACTATAA  GAAAAATACC  TGATTGTTAT  TTACACTGGA  AGAGAGGTAG
8151  AAAAGCTAAG  AGAACTCACT  TATGGCAATA  AACCAATCTA  AACTACCTGC
8201  TAAAATAAGT  GAGAAGATTA  TAAAAATGGT  TCTAGGATTT  TGGAATAATA
8251  GTGAGTATGG  TATGGGCGTT  TCATACTTCA  TTTCCAGAAT  GTTTCTGGAT
8301  TAAGTGCGAG  ACTGAATAGC  ATATATAGTG  AATTCTAATT  AAATACAACA
8351  ATGTGAGATT  CCTGTGGTGT  TTTTTCATGG  AATTAAAAAT  TAATAATTTC
8401  AATAAAATTA  ACTGCTGAAA  GAACCCAATT  AGCCAAAATG  AAAAGCATAA
8451  CACATTTTTT  CAGGAGCGAT  TTTGAGGTGT  CTTTTAGAAT  AAATTGTACT
8501  CTGCTTTTGA  TGTGATTTGC  TACATCTTTT  TGTTGCAGTT  CCTTGAGGCT
8551  CAGCCCCTGG  CCATATACTT  GCTTCACTTT  TCCTGCTTTC  TTCCATCCAC
8601  TGTCTTGGGG  CTGTTATTTC  CAAATCTCAT  CACTGTGTTC  AAGACTTATT
8651  TACTATTTCT  GGACAGTTCC  ATTTGGGTAC  ACAGGTACAT  CATACTAAAC
8701  TAACATGAAC  TCATTTTTCA  GCTACACCAT  ACAACCTTCC  CTTACTACCA
8751  AAAATGACAG  CCCATTTGTC  GGCATTCTTC  TGAATCCATA  TTCCTCCTTC
8801  TTAATTCTCT  GTGCATGATA  CCTCTGGTTG  TTTAAGTCAG  AAACCTGGAA
8851  TGTATCTTAG  CTTCTTATTT  CTCTTCCTTC  CTTACCTGTT  TTGTTAAATC
8901  AGAGTTCTTT  TGTGTTTACC  TTCTTAATGC  CTCATAAATC  AGTCCCACTT
8951  TTCTTTCACT  ACTGTGTCTT  AATTCATGCC  TTCATTTACT  TTTTATTTTA
9001  TTTTTTGGGA  TAGGGCCTCA  CTGTGTTCCC  CAGGCTGGAG  TGCAGTGGCA
9051  TGATCATAGC  TCACTGCAGC  CTCAAACTTC  TAAGCTCAAG  CAATCCTCCT
9101  ATCTCAGCTT  TTTGAGTAGC  TGCAACACCA  GGCACATGCC  ACCATGGCCG
9151  GCTAATTAAA  AAAAATTTTT  ATGTGGAGAT  GGCATCTTGC  TATTTTGCTC
9201  AGCCTTGTCT  TGAACTCCTG  GCCTCAAGCG  ACCCTCCTGC  CTCAACTTCC
9251  CAAAGTGTTG  GGACTACAGG  CGGGACCTAC  TGTGCCTGGC  CACCTTCATT
9301  ACTATTGGCA  ACAATTAGTC  ATAACCCCTT  AACAGGATTG  CTTGTCCTCA
9351  GTTGTACATC  TGAGTGATTT  TTCTAAAAGA  TTGGACCATA  TGATTTTTCT
9401  GTTTAAATGC  CCAGTGACAC  TCATTACTTT  TAGGAAAATG  TCAAACTCCC
9451  TACTCCGAAG  GCCTGCAAGC  TCTGGCCCTT  GCCTGGCCCT  CTAGCCTTGC
9501  CCCTGCTTCT  CTCCCTTACT  GGTCTTTGTG  TTCTAGCCAA  CCTGTAGGTG
9551  TTACACTGGC  CCAAATTTGT  CTTGCTGCTT  TTTGCCTCTG  TACCTTTGTG
9601  TGTGCCACTC  CTGTCTTCAG  TGCGATGGTT  GGTCCTTGTG  AGATTCTGAT
9651  GAAATGGTTG  GCCATTTTAT  TCTTATGTCA  CAATCCTGGG  ACACAAACAG
9701  TGATTTTATG  CAATTGTTAT  GTATTTGATG  CACTTGGAAT  ATTGGGGGTA
9751  GCTACATTTT  GGAGTTTTGA  GAACGAATTC  AAATAAGTTA  CAAATTATGT
9801  TTAAAGTGGT  AGACAGAGAA  CCTGATTTCA  ACCTATTCTA  ATAAAGCATT
9851  CCGTGAAAGC  CATTTTAAAG  ATGATCCATA  TTTGTTAAAG  TGGTAATTTT
9901  TATATTCTCT  GATATGGTTT  GGCTGTGTTC  CCACCCAAAT  CTCATCTTGA
9951  ATTGTAGCTC  CCATAATCCA  CACTTGTCAT  GGGAGGGAGG  TAATTACCTG
10001  GTGGGAGGTA  ATTGAATCAT  GGGGGCAGGT  TTTCCTGTGC  TGTTCTTGTG
10051  ATAGTTAATA  AGTCTCATGA  GATCTGATGG  TTTATAAAGG  GCAGTTCCCC
10101  TGCACACTTT  CTGTTGCCTG  TTGCCATGTA  AGACATGCCT  TTGCTCCTCT
10151  TTCACCTTCC  ACCATGATTG  TGAGGCCTCC  CTAGCCATGT  GGAACTGTGA
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FIGURE 3-3

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10201 GTCCATTAAA CCTCTTTTTC TTTATAAATT ACCCAGCCTC AGATATTTCT
10251 TCATAACAGT ATGAAAATGG AGTAATACAT TCCATTACCA TAAAGAAAAG
10301 GCTTTCATGT ACATTATTTT TTAGAGTAGC CTTGTGGTAT GTCATTACCT
10351 CCATGGATAG ATAAGAAAGT TGCAACTTGC ACAGTATTAG GATTGATATC
10401 AGTATTTACT TTTATTAAGT TGAACTTAAG AGCAGCTTTT TGGCTGGAAA
10451 AAAGTTGTAC TTATGTCAAA GTTGTCCTGA AAGTAGAATC CTACTCCTGT
10501 CCCCAGCCTG AAACTATTTA CTACATATTT ACTTGCATGT TCTTTAGAAT
10551 ATTCTCTCAA TAGTGTCTCC TACTCAAGTC ATCAGAAATG CTGTGATGTC
10601 ATTTTTGGAA AAGAATTCCA GAGTTATCAC CGCCTAGCTA GAAATCTGGT
10651 CTTATATTCA AATTAAACAA GCAAACCTTA ACAAAAACAA GCTAAACCCT
10701 AAACATAACA TGAACAGTCA GCTCACCACA GTTCTGAGCA CCTGCCTTGG
10751 CCTGGTGCCA CCCACGCAGG GACTGTGGAT GTTTTTATTG GCAGAGATTC
10801 AGAACAGGAA ACTCCAGCAC ACCTGGGAAC TGCGCAGACC CACCACATAA
10851 GACAGATAGC CTATCAGTGG CTGGAGGAAT GGAGGAAAGC AGTGCTTTCA
10901 AATGTACATG CCAAATGTGT ATGATCATAC CTCTTTGTTA AAGTGCCTTC
10951 TTTAACAGCA AAAGTAATTC CTCACCTTGC ATATAGGAAC TAAAAAAAAG
11001 TCGATGAAGA AATGGCTTGC CTTATTTTCA AGTAAGAAGT CTTTTTTCAT
11051 TTCACTAATT TTTAATTATG GGCATAAGTA TGAAATACAG ATTAGAAATA
11101 CTGAATGTGG ACCAAAGCAA TGTTTCCTTT GTGGACCAAA GCAGTGAATC
11151 TTTTTTCTTT CTTTCTTTCT TTTCTTTTTT TTGTTAAGAG ACAGGGTCTT
11201 GCTCTCTTGC TCAGACTGGA GTGCAGTCAG TGATGTGATG GCTCACCATA
11251 ACCTCAACCT CTTGGGCTCA AGGGATCCTC CTGCCCCAAC CTCCTGAACA
11301 GCTGGGATTA CAGGCACATA CCACCACACC TGGCTAATTT TTAAAAATTT
11351 TTTTGTGGGG GAGGGTCTCT CTATATTGCC CAAGCTGGTT TCAAATGCCT
11401 GAGCTCAAGT GATCCTCCAA CCTCAGGCTC CCAGAGTGTT GGGATTACAG
11451 GTTTGAGCCA CTGTGCCTGG CCCCAAAACA CTCCCTTTGT
11501 CCCCTCTTGA TAAACATAAA AGTCTCATGG TACTTCAGAA TTTTGTTGCA
11551 CACATCCAAG TGTAGTTTGC CTTTCCTTGT GAGTGGCAGA AGACAATGTC
11601 ATACTCTGTA TTTATCCATC AGCCAAAATT TTGTCAAGCT TTACTTTTAT
11651 TTTTTAAATT TTTATTTGTA TTTTTTTTTG GAGACAGAGT CTTGCTCTGT
11701 CGCCCAGGCT GGAGTGCAGT GGCGTGATCT CGGCTCACTG CAACCTCCGA
11751 TGCCTGGGTT CAAGCGATTT TCGTGTCCCA GCCTCCAGAG CAGCTGGGAC
11801 TACAGGCACG CACCACCATG CCTGGCTAAT TTTTTTGTAT TTTTAGTAGA
11851 GGTAGGGTTT CGCCATGTTG GTCAGGCTGG TCTCGAACTC CTAATCTCAG
11901 GTGACCCACC CGCCTCAGTC TCCCAAAGTG CTGGGATTAC AGGCATGAGC
11951 CACCATGCCC GGCCAAGCTT TACTTTTAGT TATGTTGTGG ATATAATTAG
12001 AATTATTTTC TTGTTCTTTA AATACAGAAT TATAATATTG AATGTGTGCT
12051 TTAAAAAAAT TAGTAAATGT ACCCCTCTAG AACTTCTGAT CTATGCCTCT
12101 TAGTGAGTGA GGGGAGCTGT GCCGCTTTCC TCCTCCAGTG CCTCCACTTA
12151 AGAATCACTC ACTAAGGAGT TTTAAATTCA ATTAAAGGTA TCCTTTAGAT
12201 AGTTAAGTCT AAATGAAAGG TCAATGATTA AATTAATGGA TAAAAGTCCA
12251 TTGCACCTAC GGAAAGGTGC ATTGGTCTAC AGTTCAGCTA GTACCTATTT
12301 TTTGCTAAAG ATTAAATTGC AGCTGGGCGG GGTGGCTCAT ACCTGTAATC
12351 CCAGCACTTT GAAAACCTGA TGGAGGCCGG GTGCCGGTGGC TCATGCCTGT
12401 AAATCTTAGC ACTTTGGGAG GCCGAGGTGG GCGGATCACT TGAGGTCCGG
12451 AGTTAGAGAC CAGCCTGACC AACATGGAGA AACCCTGTCT CTACTAAAAA
12501 TACTAAATTA GCCGGGCATG GTGGCGCATG CCTGTAATCT CAGCTACTGG
12551 GGAAGCTGAG GTAGGAGAAT CGCTTGAACC CGCGAGTTGG AGGTTGCAAT
12601 GAGCCAAGAT CATGCCATTG TACTCCAGCC TGGGCAACAA GAGTGAAACT
12651 CAGTCTCAAA AAAAAGAAA ACCCTAGGTG GAAGGATCGC TTGAGTCCAG
12701 GAGTTCAAGA ACAGCCTGGG CAACATAGTG AGACCCCATC TCTACTTTTA
12751 ATTAAAATAA AATTAACATT AAAAAGTGTA GTAAAATTTT TAAAAAGAGT
12801 AAATTGTATC AGCAGTGTTC TGCCTGTGTT CAGAAAGCCA AAATTTATAT
12851 TTGTGTTTCA TTTAGATTGG ATCCAAGACC AATTTTTGAGA TGTGTTTTAA
12901 TATTACAAAA ATAGAAAACT ACCTGTTCAT TAAATGGTGA TATTTATTGA
12951 CTTTTCTGTG TAGATAAGTA TTAATGCCAA GTCAAGTAGG TTAGTCTGGA
13001 GACTGTTTTT ATTAATAAAA ACCTTTTCAT CTTAATTATC CTTTTTATTA
13051 GTTTTGACTT TATGTTGCAA CTTCAAAGCA GCATCTCAAA GGGTTCACAT
13101 TTGTCAGTGG TTGTTTAAAC AACGACATTC CACAAAGTTA ATTGATGTTT
13151 TAGTGTGAAT GGGGCAGGAA GTTGTCATTG TTGTCCTGTA GTAACGTAGC
13201 ACTCAAACTT TGACAGGAGG ACCCCAGCCA TGTAGTTATT GACTGTAAGT
13251 ACACTTCCCT TAAGAGTAAG TTGTTTTTTA GGAATAAATG ATAAATGTAT
13301 GGAGTTTTAG TTGTAGGTGT TATGTTTTGT CTCCTTCTTC TCAGAGAAAA
13351 ATGTTACTGT GGAATAGGCT TAAACTGAAA AGGGGATCTG ATTTTTAATA
13401 AGATCAGATT CTTTGGCCAT ATTTTGATAT TGGTTCAAAA CAAATGTTTA
13451 ATATCAGATG CACAATGTTA AGAGCTCTAT AATGTAGTGG TAACACCTGA
13501 GCCTCAGCCA GTGACTACAC ATTAAGTTCT TGTTCATTTT TTGCAGGGGC
13551 AGGGGAGCTG GTGAGGCATA AAGAAGGGTC AGAGGAGATA ATAGACTTAT
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FIGURE 3-4

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13601 ATTTGTATTT TTATGCATAA TTATATAGGA AAACATTAAAT CCAGAGTTGA
13651 TAAATAATTT GTATGTATGT ATTTATTTAT TTTTGAGACT GGGTCCTGCT
13701 CTGCTGCCCA GGCTGAAGCG TAGGGGTATG AACACAGCTC ACTGCAGCCT
13751 TGACCTGGGC TCAAGCGATT TTCTTGCCTC AGCCTCCCGA GTAGCTGGGA
13801 CCACAGGCAT GTGCCACTAC ACCTGGCTAA TTTTTAAAGT TTTTTTGTAG
13851 AGATGGGGTC TCACCACGTT GCCCAGGTTG GTCTTGAACT CCTGGGCTCA
13901 AGCAATCCTC CTGCCTTGGC CTCCCAGAGT GTTGGGATTA TAGATGTGAG
13951 CCACCATGTT CAGCTGATAA ATAATTTCTA ATCTAAAAAT CCTATTTTGT
14001 ATGGAGAGGG GAGGGCAAAT AGGCTATTTT TTCCACATTT TGTTGCTGGC
14051 CAGAATCTCA GAGGGTTTTT ACCTGCATTA AAAATGATTA AGGCTGGGCA
14101 GAATGGCTCA TGCCTGTAAT CCCATCACTT TGGGAGGCTG AGGCAGATGA
14151 ATTGCTTGAG CCCAGAAGTT CTAGAGCAGC CTGGGCAACA TGGTGAAACC
14201 CCATCTCTAC GAAAAATGCA AAAATTAGCT GGACGTGGTG GCAGGCACCT
14251 GTAGTCCCAG CTACTCAAAA GGCTGAGGTG GGAGGATCAC CTAGCTCTAG
14301 AGGTCAAGGG TGCAATGAGC CAAGATTGCT CCACTGCCCG CCAGCCTGGG
14351 CAGCAGAGCA AGACCCTGTC TCAAAAAAAA AAAAAAAAAA GGTTATTTTT
14401 TTTCAGCATA GACAAAGCAG GGGAAGGAAA AGATTATGTT TCAAATGTTC
14451 ATTTAAACTA CTACATTTAA AGTAATACTT CCTAATGATT TAAACTTTAG
14501 ATTAGTCTAT TTATGGGTCA CCTGGAAGAT TCTTTATAAA ACATGAGAGT
14551 TTATTACTTC TTTCAATACA CGGGTGTCTG TAAATGATGC TCAATAGATC
14601 TGAAGCCTGA ACTTTCTGAA GAAATGTTGT GAAATTATCT ATGGATGTCT
14651 ACTTGAATTT AAATAAAAAT AAATTGTAAT ACATTTGGTT TTATTGGTTT
14701 TGAATTTGTA ATTATTTGGG GATTTGGATT TGGTTTATCT ACAGTTGTCT
14751 TTTTTTTTGA GGTGGAGTCT CGCTTTGTCA CCAGGCTGGA GTGCAGTGGT
14801 GCGATCTCGG CTCACTGCAA TCTCTGCCTC CCGTGTACAA GCGATTCTCC
14851 TGCTTCAGCT TCCTGAGTAG CTAGGATTAC AGGCATGCAC CTCCATCCCC
14901 AGCTAATTTT TGTATTTTTA GTAGAGATGG GGTTTCACCA TGTTAGCCAG
14951 GATGATCTCG ATATCTTGAC TTCGTGATCC GCCTCGGCCT ACCAAAGTGC
15001 TGTGATTACA GGTGTGAGCC ACCGTGCCCG GCCTACAGTT GTCTTTTTTT
15051 ACTCACTCCC ACAGATGAAT CATTATAAGG AGGTTAGCTT TCCTTAAAGA
15101 ATACACTCTC CTTAAGCGGT TTTATCAACA AAGCCAGGGA ATGCCAAACT
15151 TTAAACTTTT TACCTAAATT TATAACTGAT GCATGTATGC ATATATACAT
15201 ACATACATAC ATGTATATGT TGTTATATAT GTATGGGTAT CATCAGTATA
15251 GTCTATCAGT ATAGTAATTG TTTATCTGAA ACTTGGGGTT CTCTCTCGCT
15301 CTTTCTCTCC CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTATATAT
15351 ATATATATAT ATATATATAA ATATATGTAT ATATATTTTT TCTTTTTTTG
15401 AGACAGGATC TCATTCTGTC ACCCAGGCTG GAGTGCAGTG GTGGGGATCAT
15451 GGCTCACTGC AGCCTCGACC TCCTGGGCTC AAGTGATCCT CCCACCTCAA
15501 CCTCCCAAGT AGTTAGGACT ACAGGGGCAT GCCGCTACAC GTAACTAATT
15551 TTTGTATTTT TTTGTAGAGA CAGGGTTTTG CCTTGTTGCC CAGGCTGGTC
15601 CTGAAATCCT TGGCTCAAGC AATCTGTCCA CCTCAGCCTC TGAAAGTGCT
15651 GGCATTACAG GTCTGAGCCA CTGCGCCCAG CCTAGATTTT TTTGAATTGT
15701 AAAAAAGTAA CCTGCTCCCT ACTGAAGTAA ATAGAGTTAA AAAAAGTAAT
15751 CTGGTACAGA CACCTGTATT TTCTGACACC CCTAGAAGAG TCCCAGGTAC
15801 CCTATAATCA AATACATTAA CATTTCTGCA GCAAAATGTA TGGATAAGTG
15851 AGTTAAATAG AGACCATGAG TAGCTTCAGG TCAGTTCAGA TCAAGTTTTG
15901 CTTCTAATTA AATGTTGATA TTCTCTTACA AAAACTTTGG GTTTGGGTTT
15951 TCAGATTTGC AAATAAAATAA TTATAAATTA TTATTTTTTT TGAGACAGAG
16001 TCTTGCTGTG TTGCTCAGGC TGGAGTGCCA TGGCACGATC ACGGCTCACT
16051 GCAACCTCAA CCTCAGGCTG AAGCCATCCT CCCACTTCAG CCTCCCAAGT
16101 AGCTGGGACT ACAGGAGTGT GCCAACATGT CCAGCTCATT TTTGTATTCT
16151 TAGTAGAGAC AGGGTTTCGC CGTGTTGGCC AGGCTGGTCT CAAACTCCTG
16201 GTCTCAAGTG ATCCGCCTGC CTTGGCCTTC CAAAGTGTTG AGATTATAGG
16251 TGTCAGCCAC TGGGCCTGGC AGAATTATAC ATTTATATGT CAATATTTGC
16301 TTTTGTTTTC TGTTTTTCAG TAAACGTTTT TTAAGGTACA TTTTTTCGTA
16351 TCTCATAAGG CACCTGCTTA ATTGTTTCAG TAAGTGTGAT GTTCTACCAT
16401 ATTGGTCTAC CCTAGGTTAC TCAACCAGGC CTCCTTTGTT TAGTGAGTAG
16451 CAGGCAGTGT TGTACAACAT ATGTAGCATA TCTGTATATG TCGTCGAACA
16501 AATTGTTTTT TTCCCCTCTC TTGGATTGCT TCCTTGGGTG TACGTCCAGA
16551 AGTGAGATTA CTGGTTCAAA GGGTATGAAC AACTTTATAA CACCTGTTAC
16601 ACATTGCCAG ATTATTCTTT AGAAAACTTG AATCAGTTTA TTGTGCCACC
16651 AGTGATGTGC TGGCTTCCTG AAAACCCTAC CAATGTTTGG TTTTATTTTT
16701 ATTAGTATTT GCTAATTTGA TAAGTACTAA TGATATTTTT TAAAAGTAGT
16751 TTAAAATCAT ATTTCAGTGC TTATAAGTCT GTGTTCCCAG TTTTTGAGCC
16801 CTTTAGAAGC TGCAAATGAC CTGGCAATTA TATATAATAT TTGAAAATAC
16851 AAGAGGACAT ATGCCAGTGA ATATATTAGA GTAAAACTTC ATTCCCATAG
16901 GTAATGAAGG AATGCTTGAG ATTATCTTAG GCCTTAGATT CTCACCTGAC
16951 ACATCTTGGC AGGTAGACCA TGTCCTTGTT TCCTCTGCTG TCTTAGCCCA
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FIGURE 3-5

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17001 GGTGTTGATC AAGGTCTGTC TTAGGGCGGG GGATAGGAAT GGAAATAAAC
17051 CATGTAGAGA CTTGGGCATG AGGACTTTGT GATTCTTCCA GGTGACATCT
17101 CATCCTTCAG AGGATCAAGT CTGCAAGAGT AGCCATATCT TAATCTCTTT
17151 CAGTGCTATC ACCTTGCATC AACCTCTGGA CTCGAGCTAA TTCCGTTGAA
17201 AATATTTTAT TAATTAATTT TGGGGTATGT TAAAAATTTT GTTTGCATGT
17251 ATTTATTTAG TTATTTTTAT GAGACAGGGT CTCGCTCTGT CACCCATGCT
17301 GGAGTACATA CGGTTGCACG CTCATGGCTC ACTGCAGCCT TGACTTCCCA
17351 GGCTCAAGTG ATCCTCCCAC CTCAGCCTCC TGAGTAGCTG GGACTACAAG
17401 TGCATGTCAC CACATTTGGC TAATTTTCAT ATTTTTTGTA GAGACGGGGT
17451 TTCGCCACAT TGCCCAGGCT GGTCTCAAAC TCCTGGACTC AAGGGATCTG
17501 CCTGCCTCAG CCTCCCGAAG TGCTGAGATT ATAGGTGTGA ACCACCGGGC
17551 CCGGCTCCCC ATTTAATTTT GTTGTTGTTG TTTTTTAGAT GGAGTTTCAC
17601 TCTTGTCGCC CAAGCTGGAA TGCAATGGCA CGATCTCGGC TTACGGCCAC
17651 TTCCACCTCC TGGGTTCAAG CGATTCTCCT GTCTCAGCCT CCCGAGTAGC
17701 TGGGATTACA GACACACGCC ACTATACCTG GCTAATTTTT GTATTTTTAG
17751 TAGAAATGGG GTTTCACCAT GTTGGTCAGG TGGGTCTCAA ACTATTGACC
17801 TCAGGTGATC CACCTGCCTC GGCCTCCCAA AGTGCTGGGA TTATAGATGT
17851 GAGCCACCAT GTCCAGCCAC CCATTTAATT TTTTGAGCAC AAAATATGTA
17901 CTGAGAGCCA CGCAAGAAAC AAATTCGACT TATTCCATGC TCTTGAGAGG
17951 TCATGAGGGG AAACAAAATG ATACATAAGT AACTCTGAGA GAATATGCTG
18001 CACATGCTAA ATCCTGTGCA AGTAAGATAT AGGATTTTAG AGGAAGGGAG
18051 AATGACTTCT GATTGAGCTG ACTAGAGAAG GCTTCAGTTT TTGAGTTAGG
18101 TGTTACGAGA TTGGGAGACT TTTCTCAGCA TATCTAACAG AAGAGGGTAT
18151 CCGAGGTGAG AGTGTAAGGC CTGGGCAAGG GTTGGGAGGC AGTTCTAATA
18201 CTGAATGTTC TGACTGTGGT TTACTATGTA TTTCAGGTTA TTTTGTTTAA
18251 TCTATCCAGT AATCCTTTCA TGTAACAATT ATGATGTGTG TGTTTTAGGT
18301 GGGGCTACTA AGGCTAGTAA GTAGTGAGGC TGGATTTAAA CTTAAGTCTC
18351 CAGCTTCGTG GCCCAGGTTC TTTATACTTG ACTCCACACT GGGCTTATTA
18401 AGTGAATGAC AAGGAGTTTG ATTTGTCGAG GGCCGAGGAT ATGTAGTGAA
18451 AGGTCATAGA CTATAAGGCT GGCAAAGAAT GGTGGAGCTG GGGAACGGAA
18501 GATCTAAATG CCAAGGTAAG CTTGGACATT ATTTAATAGA GGCAATGGGG
18551 AGATACTGAG GATTTCTGAA GAGGGTTTCT AAGTAGTGCT TTAAAAAGAT
18601 CTCTGGGTTG CAGAGGCAAG AAATAGGAGG AACACCAATT ACAAAGCCCC
18651 GACCGAAAGC CGAGTGAGAT TTGAGGGTCA GCCATGGAAA TGGGAATGAA
18701 GGGACAGATG TGAGACATTT CAAAGGATAG ACTGCAGGAA TTCTGGCAAA
18751 GAATGGGTTG GACAGTGATG AAGAACACAG AAACAGCATT GATGCCTACA
18801 TCTGGAGCCT GTGTCTTAAT AATTTTTGAT CAGGGAGACC TACAATACAT
18851 TTTGTATTGT GCCCCACAAA ATCATGTCGA CAGCCCTAGA TGATGTCATG
18901 GACAGGTATG GGGCATGAGG AGAAAGAGTT GCCAGGGAAA GGCTGGCTCA
18951 CATTTTAGAC ATGTGGAGCG TTAAGGGTCA GCAAGACATC AAGGGCGATG
19001 TCAGGCAGGT AACTGGAAAT GCAAACTGGT AGTCTCAGAG TGACGCTGAG
19051 TCCAGTGGTG GGGCTTTGGA AAGAACATGT ATCTCTAAGA GGAACATGAC
19101 ATAATGGAAA CCCAGAAATC CTGTCTTGAG CGGACTCAGG GGCTGCTTCT
19151 AGGTAATTTA GTTCATTTCT ACTGAAATCA TTATATTTAA AAGTATGGCC
19201 GCACTGAGAT GGCCACTGTA GCTGCTGCCA CCTCTTAGCT TTGGTCTTAA
19251 AAAAAAAAAA AAGTAATAGA ACTTCCTTAA AATGTCTTTC TAGCCTTTGG
19301 ATTTCTCTAA TTCAGATTTG CGTCTTCCCA AGGGTCAAAA TTATATTTTT
19351 ACTATCCCTG TCTTAGGTAT TTCCAAAACT TCGTCTTAAG ACTTAGTCAT
19401 TTTTTTCCTT CAATTTGACA TGACTGCTAA AGACTTTTGG CATGTTCCTC
19451 CTCCTTTCAT TTGTGATGTA ATTAAGTTGG TCTGTAAGTC TTATTTTTAA
19501 GATGTTCTAG ACCAAGAGAC TGTGAGAATA GCTTACAGTC ATTTCAACTA
19551 ATTTATGTAT TTTAAATTTA AAGTATTGAC AGTGGTGAAA ACCTGTTCAA
19601 CAAGCAGATG ATGTTATCTT ATATATTCAC AGAGTTTAGT AACTGAGCCA
19651 ACTACTTCAT TCACAGTTCA AAATGAAAAC ACTAATTCT TTTAAGTAAG
19701 TATAGATTCT ACTCTTTAAA AGAGTTATCT AGGAGAGCTA CTATAATACT
19751 ATTATAGAAT AAGTGAAATT AAGTTATCTG ACTGGGACTG GGGTGGAATA
19801 TTGCACAGTT TATTGAGAAA TATGGACTGT TTTTGCACAT TCATAATGGA
19851 CATTTGAGGT TTGTTAGGGG AGGAGGTGTC ATCTTTATGG CACTTTCTGG
19901 CTGGGAAGGG AGTCAGTCCT AATTGAGATA ATAACTAGCC ACCTGGCCAC
19951 ACACAAGTGT GTTTTGCCTT AGTTACCTGT CACACACTGA GCAGTGAGAC
20001 TCAAGAGAGT GTCAAAGTAC TTTTCAATGC ATAAAGCACT ACAGATCTGT
20051 CCACACTGTT GTGAGTGAGC AGGTTGGCAC GGTGCCTGTG TGCGGGCGTG
20101 TGTGTTGACT CACGTGCTGT CCTGTGATCT CTCAGGACTC AGGTCCTGAA
20151 TTGCTCTGTT GTGACTGAAG CCCAGCTGAA GGTGCTGGAA GTGCAGTGAC
20201 CCTGGAGGAA GAACCAGTAA CAGCAGAGGG TGGATGAAAG GGAATTGATA
20251 GTTGTGTAAG AATAGATATC TGCCGTTTTT TGTAAGCCAA GACACCTTTA
20301 CCCTTCCAGT AATTGTTTCA TCTTTTAATA TCATTTGGCT TCATTTACAG
20351 AATCTGTATT AAAGCAAAAG TCAGCATGTA AGGTGGTATT TTGACCACAT
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FIGURE 3-6

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20401 TTGTCTGCTG TTGTGCCTTC TGGGTGAACT GAAGTACTGG CTTACTGACT
20451 AGTAAATATG TTTTCTGACA ATTATAGGGA AGGGAAGAAA AGGAAAGTCC
20501 AATTAAAGCA TTTTTCTCCT CAGAGTTTGA AAAATAGAAT TCATGCAATC
20551 TTTTAAATTC CATGCCAACA CATCAGACAA GAAGAGACTT GATAGTAGTA
20601 AAGGTTGGGA ATCAAAAGAA CAATGTAAGT TTTTGATATT GACTTCAAAA
20651 CATGGTGTTC TATAATTTAG TGTTCATTTG TTACGTGTAT GGTATTATAA
20701 TTAATTTTGT ATATGTGGTA GTTATTTTTT GTACTTTGAT TAGGAAACAA
20751 ATATTGAGCC ACTTCAAGAG GCAGACTATT TTGGAAAAAA AAGTCTGGTA
20801 AAAGTAATGC TTAATCTAAT TAATCTGTCT TCATCCTCTT AATTCATCAA
20851 GATGACTTTG GGTGTCTGGT GGCAACTGAG AATGGGTTAT GGAAGAACGT
20901 CAAGGCAATG TAATCCCTAT TATTTACGGT TACTTGAGAG GATAAATTAA
20951 TCAGCGGTCA CTAATCTTTG GATAATCACT CTATTGAGCT GGAACTATCC
21001 TTAGTATTTT GGAAAGCAAG TCAGTGAGTT AGAACTGTCA AAACTGATCA
21051 GCTTTTCTAA GCTTAATGAT AAGTGAATAG AAACTAGTTG CCTTCAACCC
21101 TTTCCTCCCT GCATTGCAGC ATGATCATTC TGTAACTCTG GAAATGGTTT
21151 ATGGAACAAC AGTGAAAATA CATTGATACA CTGTCTTGTG GTAGATTTTC
21201 AGATAGGCTT TAGACAAAGT TCAGAGCCTT TCCTCTAGCT GGGGATTAAC
21251 AAAGCTGCCT TCATAGTTAA ATGTTTGCAC CCTGTGTATG CATTTTCAGT
21301 TACTAGAATT AGGTAAGTTA GTGTTATAAA ATTGGTTTGA GTGTGGATTG
21351 TTTAGGAAGT GAGTCTTTTG GTGGCAGCAA TTCTGTTATG CATTAAAATAG
21401 ATACATATTT TGAACTAGTC GACATTGTTT CAGTCTGTAT TTATTAGATG
21451 CTGGGGTGGG TATGGGAATA AAGAAACGTA TGAGGGGTCT TGGAAAAGTT
21501 CATGGAAAAA ATGTACACTA TGAAAAAAAA CTGTGCATGG ATTTCAAAAT
21551 ATTTTTGAAC CAAAATCAAC TTGTACTAAC TTGTTACAAC ATGTCTGAAC
21601 TTGTTACAAC ATGTCTGAAC AGTTCGAGAC ATTAAGAAAT GATATCGCAC
21651 CAGTTTTTAA AAAGCGCCTA TCAGGGTAAC ATGAATTCTG CTAAAATTGA
21701 AGCAAGAACA AACATCAAAT TTATGGTGGT GCTTGGGTAG AAGGATGGTG
21751 AAATCATTGA TGCTTTACAA AAAGTTTATG GGGACAATAC TCTAAAGGAA
21801 CCAGCAGTTT ACAAATGGCT AACATCCTTT AAGAAGGGAC GAGATGATGT
21851 TGAAGAGGAA GCCCACAGCA GTAGACCATC CGTGTCAATT TTCAAGGAAA
21901 AAATTAATCT TGTTCATGCT GTAATTGAAG AGGGAACTTT ACATGAAATT
21951 TTAAACAAGT GGGATTGAGA TCCTGTGGCA TATGTCTGAA GGATTGTAAT
22001 AGGAGAGGAA ACATGGCTTT ACCAGTATGA TGCTGAAGAC AAAGCACAAC
22051 CAAAGCAATG GCTACCAAGA GGTGGAAGTG ATCTAGTTAA AGCAAAAGCA
22101 GACTAGTCAA GAGCAAAGGT CATGATAAGA GACTTTTGGG ATGCTCAAGG
22151 TATTTTGCTT GTTGACTTTC TGGGGAGCCA AAGAATGATA ATATTTGCTT
22201 ATTGTGTGTG TTTTGAGAAA ATTAGCCAAA GTTTTAGCAA AACAAACAAA
22251 TACCCAGGGA AGCTTTACCA GAGAGTCCTT CTCCACCAGG ACAATGTTCC
22301 CGGTCATCCT CTCATCAAAA AAGGGCAATT TTGCAAGAGT TTTGATGGGA
22351 AATTATTAGG CATTCACTTA CAGTCTTTTT TTTTTTTTA GTTGGAGTCT
22401 TACTTTGTCT CCCAGGCTGG AGTGCAGTGG TGCAATCTTG GCTCACTGCA
22451 ACCTCCACCT GCCAGGTTCA AGCAATTCTC CTGCCTCAGC CTCCCAAGTA
22501 GCTGGGATTA CAGGCGTGAT CCACCATGTC CAGCTATTTT TTGTATTTTT
22551 AGTAGAGATG GGGTTTCACC ATGTTGACCA GGCTGGTCTT GAATTCCTGA
22601 CCTCAGGTGA TTCACCTGTC TCGGCCTTCC AAAGTGCTGG GATTACAGGC
22651 ATGAGCCACT GTGCCTGGCC TATCTTACAG TCTTGATTTG GCTTTATCTG
22701 ACTTCTTTTT CTTTCCTAAT CTTAAAAAAT ATTTAAAGGG CACCTATTTT
22751 TCTTCAGTTA ATAATGTAAA AAGGACTGCA TTGACATGAT TAAAATTCCTG
22801 GGACCCTCAA TTCTTTAGAG ATGGACTAAT GGCTGGTATC AACTCACAAA
22851 AGTATCTTGA ACTTGATGGA GCTTATGTTG AGAAATGAAG TGTATATTTT
22901 CATTATCTTT TAATTTCATT CTTTAGTGAA TTTTTTGAGG TCCCCTTGTA
22951 TACATTTTAA TCCTAAGGGA ATAAAGAAAG GAGGAAGTCC TAGCCCTGTG
23001 CTGTCTGCCT AGGTACAGTG TCTGAAACAC AGACCAGTAT TCACCCTTTG
23051 AAATTTGAGG TTTCCATTCA GGAGGTTCTC AAAGAGAATA AATGAGATTG
23101 CTATGCAGGT GGAATCAAAG AGCACACGGC TTATTTATCA TAATCAAAAT
23151 AATGCCATTT TCATAACAAA CTTCACCTGC TTATGTACAT TGTAAATTGT
23201 TGCCTTGATA AGCTTCCCGG AGATAAAGTA ATTCAGCTAA GTATTATTTC
23251 CAATCATAAT TTTGTGTCAT TATGAGCAAC ACAATACTAT ATATGGGATT
23301 GATTCACTGC AGAACTGGAA TAAATATAAA TTAGATCTTT AGAAAAGAAA
23351 CGTAGATTTA AAAATCTTAT GTTAGAAGGC TCAATTAATT AAATGTAATT
23401 AATTTTTTAA AATCAGCTTT ATTGAGGGAT GACTTAGATA TTATATAATT
23451 CACAAATTTT AAGTGTACAG TTTGATAGTT CTGACAATCA AACTGTATAC
23501 AATCATGTAA CCACCATCAC AATCATAATA TAGTGTGTCC ATCACCCCAG
23551 GGTGTACCCT CGTGATCCTT TTTGCAGTTA GTCTTTTTCC CTTACATTCT
23601 GGCTCCTGAA AACTTGATCT GCTTTCTGTC ACTATAGCTG TGCCTTTTCT
23651 AAAATTTTAT ATGAATGGAA TCATACAGTG TGTTTTCTTT TGTATCTGTT
23701 TTTCACTCAG CATGATGCTT TTGAGATTTC TCCTTGTTGT GGTATGTATT
23751 AGTAGTTCTT TCTTTTTTAT TACTAAGTAG TATTCCATTG TATGCCTATG
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FIGURE 3-7

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23801 CCACATTTTT TTTTTTTTTT TTCGAGACAG AGTTTTGCTC TGACATCCAG
23851 GCTGGAGTGC AGTGGTGTGA TCATGGCTCA CTGCAGCCTT GACTTCCCAG
23901 ACTGAGGTGA TCCACCTGCC TCAGCCACCT GAGTAACTGG GACCACAGGT
23951 GTGTGCTAGT CTGTCTAATT TTTAAATTGT TTGTAGAGAT GGGGGTCTCT
24001 GTATATTGCC CAGGCTGGTC TCAAACTCCT GGCCTCAAGC AATCCTTCTG
24051 CCTTGGCCCC TCAAAGTGTT GGGGTTACAA GTGTGAGCCCA TCACACCTGG
24101 CCTACCACAA TTTTTTATCG ATTCACATAT TGATGGATAT TGGGTTGTTT
24151 TCAGTTGTTG CCTATTATGA ATAGAACTGC TATGAACATT TGTATGCAAA
24201 CCTTTGTTGG GATGTATGTT TTTATTTCTC TTTTGTACAT TAAATTTAAA
24251 TTTAAATTTT GTTCTGTATT ATTTGTATTT TTAAATTTCT CAAGTGGGTA
24301 ATACTGTGTA CTTTTTTTTT GAAATTAAAA AAATTGTGGC TGAACAAGGA
24351 GATAAAAAAG TAGGAGTGAG AGGACTCTGG AGAGTTACAG GGCTTTGGTT
24401 TAGAGGATTG GATGAATAGT GGTGCTGCCA ATAAAGAAAT TTAAATATGG
24451 CTGATATTTC CTATATTTAA GAAAGACCAA AGAGGGTCCA TTGAAATGAG
24501 TCAGTGGGAA ATCTCTGATG ACTTCAGCCA GCACGCTTTC ATCGGCCTGG
24551 ATATATGGGA AGTGAAGTCT GATTATAGTC TGTGGAGCAG TGAATGGGAG
24601 GAAGAGATAG GGGTACAGGC TAAGAAGGGA GGAAGTCAAG TCAAAGGGAG
24651 AAGTAGGGTG GTAGCTAGAG GAAGATTAGA GTCAAGCGAG GGTAACAATT
24701 TTTTTTTTTT TTGAAGATAG GAGTAGCTTG AGAACTAACT TAAAGAAGGA
24751 GCCTGTAGAG AGGGAGGAGG TGAAGTTACT AAAGGTCTAA TTGATGGGGT
24801 AAGGTTCATG AGCAGATCAG ATCTTTACAA GGAAGGTTCT TGCTGGGGGG
24851 CAAGATTCAA AACCCCTATT CAGAACCAGG AGAGAAGAAA GTAAGAATGG
24901 GAGCAAATGT AGGTAGGTTT GGTGAGGATC AGGAAATGGA GGGGAAGAGG
24951 TCATTAAATG TGGTCCTGGG GTTGAGCAGC AGATTGGAAG AGAATGGCAA
25001 AAGTTTGGGA GCTGATTAGT GATAAGGAAA AGGTTTGAGA ATCCGATGAA
25051 GATTAGAAAC CATGCATTTG TAGTGAAACT TGTTTCTAAG ATTGTGCCCT
25101 TACCCACCTC CAGCTGTGCT CTGATAGGTG AACTATACAA TTGATGTAAG
25151 GCTGGCAGAT AATCAAAGCC AAGAAATTTC ATGTTTTCTA TCTATTTTCA
25201 CTTCCGTGCC ATATAGCTTC TCTCATATAG TACTCATATG TTTTGAGTTT
25251 TTGGTGAAGC TGATTAAACA TTTAACAACT TTTTTTTTTA CATTTTTTAT
25301 TGTGACAAAA CATATATAGC ATAAAATTAC CATTCTGGTA AATTTACCAA
25351 AACCCATTTA TAGCATAAAA TTTACCATTT TGGTCAACTT ACTGTAAATT
25401 ACTGCCAGTT CTGTACAGCC ATTTGTTTAA TGCAGTCTGC TCTAATACCC
25451 TCCAAGGCAA AATTGCAAAT AAAAACCTGT TTTGATTTCT ACTTAATTTT
25501 GGTAAATTTA CCAAAAGGGC AAATTTTATG CTATAAATTT TTTTTGTTTT
25551 GACATTTAAA ATATGTTTTG TAAAAAAAAT TGACAGATAA AATTGTATAT
25601 TTAACATGCA TAATGTGATG TTTTGTATTA TGTATAACAT GATGTATATG
25651 TCATACATAA CATATATACA TTGTAGAATT GTTAAGTCTA GGTAATTAAC
25701 AAATGCATTA CCTCACACAG TTATCATTTT TGTGGTGAGA ACATTTTAAC
25751 ATCCACTCTC TTTAAATTTT TCAAGAATAA AATTTTATCA TCTGGTCATG
25801 GTGGCTCACG CCTGTAATCA CAACACTTTG GGAGGGCAAG GCGGGAGGAT
25851 TGATTGAGAC TAGAAGTTCT AGACCAGTCT AGACAACATA CTGATACCCC
25901 GTCTCTACAA AAAATAATAA AAAAGAATGC AATATTGTCT AAATTTCTTG
25951 AATTTATTTT TCCTACCTAA TTGTCGTTAT ATATCCTTTA ACCAACGTCT
26001 GCCCATTTCC CTCTCCTCTC TAACCAGTCC AGCCTCTGAG ACCATTGTAC
26051 TTTCTATTTC TATGAGATCA GCCTTTTAAG ATTCTACATG TCAGTGAGGT
26101 CGTGTAAGTA TTTGTCTTTC TGTACCTGGC TTGTTTTACC ATTGTCACCA
26151 TTTATAAAGT GTACAATTTA GTGGCATTAA GTACATACAG AATGCTGTTC
26201 ACCCATTACT ACTGTCCTAC AATTTTAATT TGAGGCATGA CTTTGTCATC
26251 TCTCTTCTAT CCTTTGTACC ATTCTTGATC TATAAACTCA ACAAAGTCCT
26301 TAACTGAGTA GAATATTTTT GTATGTGTGT ATAGATGTGT GTGTGTGTAT
26351 ATAGGTATGT ATAGATATAG ATATAGATAT AGATATAAAA TTTTTTTTTG
26401 AGACAGAGTC TTGCTCTGTT GCCCGGGCTG GACTGAGTGG CATGATCATG
26451 GCTCACTATA GCCTCTACCA TACAGGCTCA AGCAATCCTC TCACCTCAGC
26501 CTCCCAAGTA GCTAGGACTA CATGCATGCA TGGCTAATTA
26551 AAAAAAAATT TTTTTTTTCT AGAGATGGGG TCTCTGTGTT GCCTAGGCTG
26601 GCCTCAAACC TCTAGGCTCA AGCAGTCCTC CTGCCTTGGC CTCCCAAGGT
26651 GCTGGGATTA TAGGAATGAG CCACCGTGCC TGGCCAGTAT TTGTATTTTT
26701 GATACTGAGC TTAATTTTGG CAAGTGCTGT GCAAGGCACA AATTGTGGTG
26751 TTAGCTTTCT AACTATTTGG TTGTAATTAT TTGTTAATAT CTGTCTTTCC
26801 TAGTCATGGA AAGTCCATGA GTGCAGGGGC TGTGTCTGTC TTGTTTACAA
26851 CTATATTTGC GCTGGCCAGC ACAGTGCTTT ACACATAGTA GACATTCAGT
26901 GATGTTTCTG AACAAATGAA AGTCCTTCGC TGCAAGAAGA ATTTATTTCA
26951 GTTTAATAAG TTCTTTCTGA ATGCTTCATA TGAAGTAGGC AAAATTTGTA
27001 TTCACATATT AATACAGATT ATAGGTATGG CACATTCCAA TGTCTATTTA
27051 ATTAGTAGAA ATCAAAAAGA GTTTTTATTT GCAATTTTGC CTTGGAGGGT
27101 ATTAGAGCAG ACTGTGCACT AAACAAATAG CTGTACAGAA TTGGCAGCAA
27151 TAATCCCAAA GTTTGAAGGC TGTAGGTTAA TTAGGATAAC TTGACAGGAA
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FIGURE 3-8

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27201 GTGAGTTAAT CAAATTTGAG AGTTTAATCT TCCAATAATT TATGTTCAGA
27251 CATACTTCAA GTATATCAGC AGGTAACAGG AACTTTAGTT GCAGAATGCC
27301 CCAAAACACA AGAACTCCAG TGGATTTTCT GGCTTCCAGG AATGTTTTGG
27351 AGGAAGAAAA ACCAATAAAA TGATTTGGGG GTCATTTTGT TCCATTACTC
27401 TATATTAAAT ATACTAGAAT TTAAAATATT AAATTTTAAA AGATAAAAAG
27451 ATGCAGTTTA CCTATTAACA AATTAAATAA TTTAGGAATT CTACTTAGTT
27501 CTGTAATACT TTAATATGAG TAAATATGGG CATTTCTGTG TTAGCTAGAA
27551 TTAGATAGAG TATTGCCATT TTTTTCAACT GGCTTATGGT TAAATGGAAG
27601 TAAAGGGGCA AACTACACAT ATAAGAATTA GTAGTACAAT ATTTAATACA
27651 CCCCTGTAAG AGTTATCACA GTGTGTCCTC TGTGAAAAGT AAGGGCTCCA
27701 TGTGTGCTTG TGAAAAAGGC CACTGGAGGC CCTTTTCAAA AATTAAATCT
27751 GCCTCCAGCA AGGTGTTTTT CGATCACATG GAAAGGGGAA GAAGAAGCTA
27801 TCAGGAGCTC TGGGGTTTTT TTTGTTGTTG TTTGTTTGTT TTGCCACTTT
27851 TAACTCTCAA GCTAAAACTG GGGTTTCATT TGAGGAACCA GTAATAGAAA
27901 ATTTCTTATG TACATTCAGC AAAATCTAGT ACTGAGTGGT TACTTTGGCT
27951 TTTCATTGTG GGGATTGTGT GTGTGTGTGT ACATGCACGC ACTTGTGTGT
28001 TTAAGCGTGT AAGGCAGACA GACAGTGGGT ACAGGTCTTT GAAATGGACT
28051 TCTTGGCAAA AGTAATAGAG AAAAAGAGGA ATACAAATAA GGGAGGAGGG
28101 ACAGGGAAGA GCAGAGTCAC AGGAAACAGT GAATGAGGCT GCAGTCTCAG
28151 TCGCCCTTTC TTTGTCCCTC CAGTGTTGTT GCCTGTCTTA TGATGATGCT
28201 GGTTTTCAGC CAACCTTGAG TGAGTAAAAG CCGGGTCTGA GGTCTCAGTG
28251 CCTGCGTGGC TGATATGAGC AGCTTGCATT TCTGACTGGG CCCTGGAGCA
28301 GCAACAGCAC AGATTTCCAG GAACAGTTCC TCTTGTCATT TTTATTCCTG
28351 AGTCATCAAA TTTAGTTATT CAGACGTCTG CTGTTCCCAG CTACATACAG
28401 ATCAAACAAG CAGGGAATTT TTTTCTTTCT CTTCTCTCCC TCTTTTTTTT
28451 GTATTTCCAT CTTGTTTTGT ATACCTTTTC TTTGTTTAAG TCAAGCATTT
28501 GAACATCACT AGTTACCATT TCCTTTAGCA AGCATAGGAC TTCTGTCTTA
28551 CTTAAATGTC TTCTAATGCT GTGATGTGTC ACAGTTAGTT GAGACGTTAA
28601 AGATGTTCCA TACATGTGAC TACATTGGTA AATCTCAAAA ACATCATATC
28651 GAATGAAAAG ACAAAGTTGT GAAATGTCTG ATGTGATGCC ATTTCCTTAA
28701 AAAGTCATGT AAAGCAATCC TACCACATCT CATAGAATCT AAAAGGCTAT
28751 ACTGATGCTA AGATGCACTA TTATTTTCTG TACACTGAGA AAGGGGGAAA
28801 ATTGCCACTT AAATTGTGAT GTAATGTCTC ATTATGGATT GTAAGATACA
28851 TCTACATTTT AGAAATGGTA TAATGTTAAA AATATGCATT TTAAATTGAA
28901 GGTAAATTTA ATTAAATTAT TTCAAAGGAA ATAAGGTAAA TGTATTTTAT
28951 TGAAGCATAG TTATGTAATA AAAATAGAAA AGCATGCATA GGAATGCTAT
29001 TTAGCCAATA CAGGATGTGG TAATCTCTAT AAAGGGAGGG AGGGAAATGG
29051 AGGGGGGAGG CCAGAGGAGG GGCCTCATCT CTGTAGTTTA TTTTTTAAAA
29101 TTATAAAGCA AATATTACCA GAGTTAAGAT TTTACAAAAT TCATTGGTAA
29151 GCACCTATAA TTTTCTGAGT GCTTTCAGTA TTTCATAATG AAAAGTATGT
29201 ATTTTAAAGG TACGTTATCT ATTTATTTTT ATTTATTTTT TTTGAGACAG
29251 TGTCTCATTC CATCGCCCAG GCTGGAGTGC AGTGGTGTGA TCTTGGCTCA
29301 CTGCAACCTC CTTAAAGCTA CATTATTTAA AAGTCACATA CAAAGCAAGT
29351 TGCAGAAGCC TGTATGTAGT GGATTCTATT TTTTTTAAAT AGTATTTAAT
29401 TGTATGTTCT TCTACACTTT TTCCTATGTC CATCTTACCA TAGCTGTGCC
29451 TTTTTTTGGTG GAAGTGAGGA CAGATTGCTT TCCACATCTC CATTTTTTGTG
29501 TCTGAATTAA AAGATGGACA AGTATCATGT ATTATCTTAG TAGTCATCAA
29551 ACAAGGAAAA AGGTTTCTTT GTTTGCTTGT TTTTTTTAGA TGAAGTCTCC
29601 GCCCAGGCTG GAGCGCAGTG GCACGGTCTT GGCTCACTGC AACCTCTGCC
29651 TCCTGTGTTC AAGCAGTTCT CTGCCCTCAGC CTCCTGAGTA GCTGGGATTA
29701 TAGGCGCCTG CCATCACGCC GGCTAATTTT TGTATTTTGA GTAGAGACAA
29751 GGTTTTGCCA AGTTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAGGTGAT
29801 CCACCTGCCT TGGCCTCCCA AATTGTTGGG ATTACAGGCG TGAGCCACTG
29851 TGCCCGGCCT GGAAAAAGTT TTTAATGGTA AAGATGTCAT GGAATGAATA
29901 GGATTGGCTG GCATTATTTC TTGCTGTTAA TAAGCAGTGA GAAATGTTTC
29951 CATTATATGT TTCTTTGAAG CCAGCTTTCT GGTTGCTCCC TTATTCTTTC
30001 TTTCTCAGGC ATGTGGTATC TAGAAAGGGT CAGGAGTACC TTGATAAAAA
30051 TTATTGTACA AGTTGAGCAA AACTCAGTAG TATCATGCCT AGAGATCTGA
30101 TAAAGAGGCA CTTTTAAAAT AGAGCCTTGA AGCTAACAAA CTTTTTTTTT
30151 TTAACCCCTT TACTGAAACC TAAAAGAGG TCTGCAGTTT TTCCCTCCTG
30201 TCACCAGATG AAAGGGCTGT AGTAGTGTTT GCTTATTCCT CAGGCAGTGA
30251 GGAATCAAAG GACTGAAGGG GTGTTTGTTT TATCATACTA CTTGTAGGGA
30301 CCCCTTACCT CCTATACCCA TGAAAAAGGA ATATTTCTTA TATCCCATAA
30351 TATTCTTTTA GTATCACACT TAGGTTTTAA TGTCCTTACT GTTAGAGTAA
30401 AATAATTTGG GCAAGACCAA TTTTTTAAAT GGCAAATATA GTCACATCAC
30451 TTGATTCAGA ATCTCACTCC CTAGCATCTC GCGTAATGAC TCATAAGAAA
30501 GAAAAAGCTA AATGCATGAA GAGGTTCACT ATACCATTAC TATAAAAAAG
30551 TAAAAATTTG TTTTTGTTAT TTTTTTTTTG TTTTTTGAGA TGTAGTCTCT
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FIGURE 3-9

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30601 CTCTGTTGCC CAGGCTGGAG TGCAGTGGCG CAATCTCGGC TCACTGAAAC
30651 CTCCGCCACC TGGGTTCAAG CAATTCTCAT GCCTCAGCCT CCGGAGTAGC
30701 TGGGATTACA GGCATGCACC ACCATGCCTG GCTAATTTTT GTATTATTAG
30751 TAGAGACGGG GTTTCACCAT GTTGGCCAGG CTGGTCTCGA ACTCCTGACC
30801 TCAGGTGATC CACCCACCTC AGCCTCCCAA AGTGCTGGGA TTACAGGCAT
30851 GAGACACTGC ACCTGGGCAA AAAAAGTAAA AATTTGAAGT CAACTTAAAT
30901 GCCCCCAAAT ACAGGAATGG TTAAATGCTG ATGACCTACT TTATGTACTA
30951 TGATGCAAAT GCAAATGATA ATGGTTACTG TGCAGCAACA TGGAAGAACT
31001 TGGTGAAAGC AGGATGTACC ACATGACTGT AACTCCAAAA TGTGCTTGCA
31051 TGTGAGGAGA GATCAAGGGA ATATAGAAAA ATGAAGACAT AGTTGTGTTA
31101 GGGTGGTAGA ATTTTGAGTG GATTTCTCCC CCCACTATTG GTAAAAATTT
31151 TTGTACTTAA TTCGTTGTGG GCAGCCAGAT CTTTTAAAGG TAAATTTGAA
31201 TTTCTCTTTA AGAAAATGGC AGACAGAAGG ATGGGGGATA CTAGAAAACT
31251 AAAAGTAGTG CCCCCTTTGA AGATAAAACT AAAACATTTT AAGCCTGGAA
31301 TTGCTTTAGC AGTACATGTA TTGATTATTT AATTTTGTCC TTTAGAAGAA
31351 AGTTGGCCCA ACACAATTAC ATGGAAGTTG GGTTATTGAA GAGGATTGAT
31401 AAAAGAAGTG GGAAGGTCAG GCCAGGTGTG GTGGGTCATG CCTGTAATCC
31451 CAGCGCTTTG GGAGGCCGAG GTGGGTGGAT AACGAGGTCA GGAGATCGAG
31501 ACCATCCTGG CTAACACGTT GAAACCCCGT CTCTACTAGA AATACAAAAA
31551 AAATTAGCCC AGCATGGTGT TGGGTGCCTG TAGTCCCAGC TACTTGGGAG
31601 GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGCGGAGGT TGCAGTGAGC
31651 CCAGATCAAG CCACTGCACT CCATCCTGGG CGACAGAGCG AGACTCCGTC
31701 TCAAAAAAAA AAAAAAAAAA AAAAAAGTG GGAGGGTCAA AGCCAATGTG
31751 CACGTTTATT CTTTTGTACC ACCAAATAAA CCGAATTTTT GGACCAACTT
31801 TACTTTAGTC AATATTTGGT TATTTGCTTT GAAGCTATTT GTTTGCAATA
31851 ATGCAATTAA CATCCTCAAC AGAGCCAAAG TCTGACCCTG AAATGGCAGC
31901 ATCTTAACTA ATTTTATCAT TTGAATAGAA ATTGAACCCT TTGAGGGCAT
31951 GAAGTACTAT TTCTTTTCTC TATACTTCTT GTTTTTGGTT TTTGCTTCAC
32001 CACCGATTTA TGACTACCAA AACCCCACAG ATCCTGTAAT TAACTCACAG
32051 CTGCCATCTT GCCACCGTAG ATAGAATTCA GGAGCTGGTG ATGAATGGGG
32101 AGAGAATAGA AAAACTAATA GACTGTAAGA ATTTTAGACC TCTGTGGCCT
32151 TGCTGAACAA TTAATCCAGC CCCTTCACTT TACAGGTAAG TAAACAAGTC
32201 CCAGGGACCC AGCAGTGAAC CTGTGTCTTA GGACTTCAAA TCTAGTGCAC
32251 TTTCTGTTAT ACTTCAAGGA GAGAACTGGA GGGAGAGCGA AGCCAAAATA
32301 CTGACATTTT AGAGGCTGCT TTTTAAGAAA GGATAGGACA TTGGACTTGG
32351 TGTCATTATC ATGTTAAGTT ATAGAATTTT TAAAAACACT ACCACTCCAA
32401 AACAAAAATA GGTAAAAGAT ACGAACAGGC AGTTCACCAA AGAAGAAATA
32451 CAGTAGGCAT GAAAGAATGC ACAACATAAT TTAAGAAATG TAAATAACAA
32501 ATATCTATTG CTATCTCAAG AGAAAACATT TACTATGAGC TTTATTATTC
32551 AAACCATTGG CCTCATAGGG CTTCTTGTTG ACAATCTACC CTAATTTTAG
32601 GAAATGTAAT TATAACATAA AAAAATGAAT GCAAATGATA AAAGACGAAG
32651 TATAACCCGC TCAATAAATT TTCTGAAAGT TATAGTAGTT TTAAACCTCT
32701 TTTTATTCAT TCCCTCCAGT TCTGTCTAGC ACCTGTAAAG ATGAATTATT
32751 GGCTGGGTGT GGTGGCTCAC GCCTGTAATC CCAGAACTTT GGGAGGCCGA
32801 GGCGGGCGGA TCACGAGGTG AAGAGATCAA GACCATCCTG GCCAACATGG
32851 TGAAACCCTG TCTCTACTAA AAAATCCAAA AATTAGCCTG GCGTGGTGGT
32901 GCATGCCTGT AGTCCCAGCT ACTTGGGAGG CTGAGGCAGG AGAATTCCTT
32951 GAAACTGGGA GGTGGAGGTT GCAGTGAGCC AAGATCGCAC CACTGCACCC
33001 CAGCCTGGCA ACAGAGTGAG CCTCCGTCTC AAAAAAAAAA AAAAAAAAAA
33051 AGGTGAATTA TCTCAGGTTT TATATGGCAT TGATGGACCA CTATTGAAGG
33101 AAGCTGTGAA GGACTCAAAG CAGTTGAGAA TAGGTATCGC CACCTAATTT
33151 TACTTGCCTT TCCTGCCACA CACAACCAGA GAAGCTGGTT CATCTCTTAC
33201 TGAGGAAATA TTTTCATGCT TATTCAGAAG ATTTTGCAGG ATCCTCAGGA
33251 AGACAAAGCC AAAGAACAAG AACAGTCAAA GTAGGAACAG GACCAAAAGT
33301 CTGCACAGTC ACTGGAAGGT GTCATGCTGA AGAAGGCAGG GATGGGACTT
33351 TGAAATGAGG CCAAGTGCAT TTCAGTAACT GAGTGGGTTA TCTGTTGTTG
33401 GCAAGCAATG TGCCATACCT TTGAAGGGCT AAGCTAGCCC AGGAGTTCTG
33451 ATAAGAGCTT TGAACTTAAT ATCGCTGACA CAAAAATAGG TCTCCTCAGA
33501 TCCTATTTGG AGGTAAACCG GGTAAAAGTG ATAAATAGTA TTGCTTTTTA
33551 AAGTTCATTA CATATTTTAG AGGTGAGTCA GTCAGACCAT ATAGAGATGC
33601 TTCATTTTAA TCCTCTGTAG CAAGAATTGG CAAAAATATT CTCTGTAAAG
33651 AGCCATTTAG TAAATATTTT AGAGTAGGCT GCATAGTCTC TTTTGCAGCT
33701 ACTCAGCTTC ATACAACAAG TAAACAAATG AGTGTGACTG TATTTTAGTA
33751 AAACTTTGTT AGACGCTAAC ATTGGAATCT TACACAGTTT TTATATGTTT
33801 TGACATATTC TTTTGATTTT TTCCAACCAT TTAAAAATGT AAAAAGCATT
33851 TGTAGCTTGT GAGGTGTACA AAAATGAGCA GTGGACCATG TTTTGCCTGC
33901 AGGGCACATT GTGCTGATCT TTACTCTATA GCATCACTGC CAGTAGAAAT
33951 ATAATGCTAG CCATATGTTA TGGACTGAAT GTTTGTAACC CCCAAAATCC
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FIGURE 3-10

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34001 ATATTTTGAA GCTCAAACCC CTGGTGTGGC AATATTTGGA GATGGGACCT
34051 TGACAGATGT ACTTAAGGTT AAATGAGGTC ACAAGGGTGG GGTCCTGGTC
34101 AGATAGGATT AGTGTCCTTA CAAGAAGAAA CACCAGATAC ACTCATTGAG
34151 AAAATGCAGA ACATTGTAAC CTTACTGGTT TAGAAACCAT AATACTGGCA
34201 GGCTTGCTGG TCTTCATTTT TATTATTTTG AATGTCTTCT TTCAAGTATT
34251 TTATGTATCC AGACCCAATT TGTATGATAA GGGAATTTCT TTCAAACTAT
34301 TAGGTGAAGT CTTTAATTAT GAAGTTGGCT TAAGCCATTA AGTAGTATTA
34351 ATGGGGACAT CCATCTTAGA AATTAACTGG AAATGTAGAC TAGAAAATATA
34401 AAAAAGTGTG GTCATGACTA ATGTCTGTAT CCATTTCCCA AAAAAGAGAT
34451 TTGCGTATGT CCTCACATTG CAGAACCACA CTGACACTCA GGGAAACATG
34501 CTGACGTCAT TCTTCCAACA TCCTTAGTTT GGATTTCATG AAACATTTTT
34551 TTCCATTTCT CCTTTTTCTG TGTTTAGTAA TCCTTTCTTG GATTCTTGAA
34601 ATCAGAGGCA CTTATTGGAG TTGATAAATG GCAGTTCTTC ATGTCACTGT
34651 TTAGAAATTT AACTTAGCTT ATGGACTAGT TCAGGCTTAG ATAACTCTGG
34701 AAGTCTTTGC ACTTTCAAAT ATACTTTTTT ATAGTTGAGT TTCTACACAA
34751 TATAACATTT TATAACTTAA ATGGAAGTAA AGTGAAATGC CAAAATGCCA
34801 GTTGATTCTG TTAATGTGTG CATCCCTCCA TTCCAGAATT CCAAAAATAT
34851 CAGACATAAT GACTTTTATT TGTATTTTAT ATTATTAGAT TTATCAGATA
34901 TAAAATTGTT CTTTTAAACT GCTATTTCTA AACACTCTTT GTTTCTTTAG
34951 TTATCTTGTG AACTGGTAAT AGTTTTCAGA CTGGTGCCTG TCCATGAACC
35001 ACTTTCAGCA TTGGTCCAGA TGACTTTCAC TTATACCATG AGCCAGCAGA
35051 TACTGTAGAT TATTTGGCTG TTTTTAAAGA GAACATCATA TCATAGTGTT
35101 GGTTATTAAT ATTTGAGCAA GATATTAGGG TTGTCTCGAT GTCCCAATCA
35151 TTGTGGAGTG CTTAGTGTGT GTTTGTTTTT TAAGAATTGA CTTGGAAACA
35201 TTTATCTTAA GGTGTTAGGG TTATTTTTAT TCTTTAGTAC TAACGGTATA
35251 AACTGAATTC CACTGAAATA GAGCTTATTT TGATGTATAA TTTTTGAAGT
35301 TATTTTTTAT AAGTCTGTGG GTAGATAGCA GCCAAGTAGG CACTTTATTT
35351 CCCTAATAGA AAAAAATATA TATTTTTGTC AAATATTTCT GTTTTATTCA
35401 TTCATTCAAA GTATATTTGG AATGTTTATT TCCAGGAAAT TTTGGAATAT
35451 ACAATACAAC CAGCTTCTTA TAACTCCACT TTAAGTGAGC CATAGGTCAA
35501 ATAATGACCA GCAAAATGTA ATGACACGTG TGCCTCTTAC TCCCTGTTGG
35551 AGGAATTGAG GCACTCTGGT AACCCTGTAG GCCTGGATTA GTCCAGTTCA
35601 TTGGCAGCAG CATTATCCAG ATTTTATTGT GGCCGGCAAC GGTGGCTCAC
35651 ACCGGTAATC CCGGCACTTT GGGGGGGCTGA GTTGGGCCTG TTGCTTGAGC
35701 CCAGGAGTTC AAGACCAGCC TGGGCAACAT AGGAAACCCT GTCTCTACAA
35751 AATATATAAA AATTAGCTGG GCGTGGTGGC GTGTGCCTGT AGTACCAGCT
35801 ACTTCGGAGG CTGAGGCAGG AGGATCACCT GAGCCCAGAA AGTTGAGGCT
35851 GTGGTCAGCT CTGATTATGC CACTGCACCC CAGCTTGGGT GATACAGTGA
35901 GACCCTGTCT TAAACAAACA AAAGAGATTG TATTGTGTTT TGAAAAACAT
35951 AGTTTTTAGA GAAATTCTGT GTTATTCTTC TATTTCCATT ACAGCTTGGT
36001 TTAAAGAAAC TATGGAAAGC TACAGACTAA CCTCCTTTTC CTTTGGTTTT
36051 TTTTCCATGT TATAGCAGAG AACCAGCCAG GGCCAGATTC CTGGGCTTGT
36101 GTCCTCTGCA GTTGCACAGG GCTCTGCTCA GAAGGGTCCC ATACTTGGCT
36151 TAATGCTCTG CTGTCAGCAT CTTGAAAATT TTTAATAATT TTATATTTCA
36201 TCTTGTTTTG TAAGTTATAA GCCCAGTGGG CCAGTGGAGG CTGTTCTAGG
36251 GGTCTGGGTT TGGCTCATGA GAGGTACATC CTTCCCACCT CCCCAGGATG
36301 GGCTCTCAGC AGCTGGCTTT CTGTACCCTG GCACCCCAGG CCCTTCTTGG
36351 CCCCTACCCC GTGTTCACTG TTGCCCTCAC CTTGGGTGAT GACTGGGTCA
36401 CATGGGAGAG GAGGAAACCC ATGTTCTGCT GTCACCCTCC ACCTCTTGCT
36451 GGGTCCTGGG TACAAGCTCA GGGAGGGGTTG GGATCAGGCG TCTGTGACTC
36501 ACAGTGTTGT GGGGAGTGAT GGTGGTCATT TTATCCCAGG CTGGCAGCGT
36551 GCTGGCATAT TGATGAGCAG CTGCTGGCAT GATGATTTGT CCTGACCCTG
36601 GACCGGACTC TGTATCTTGG CTTTAGTCTA GTCCACTTCT CAGCATTCCT
36651 TGGAAGCCCA CCTAAACTGC AGAGACAAAG AAGAATATGC TTTGGGATTT
36701 TAAAGATGGA ACCCCATATG CTATCAATTG GAAAGGAGTT CAGATTCTGG
36751 CTGGGCTGAA TCACTGATTT TCCAGGCAAG TGGAACTTTA ATGACCCACT
36801 AGTGCCCTTT GTTCACTGTG GGCTGGCTGG GGAGGAACCC TTGCCTTTAA
36851 AGAACCCTGT GCTCTTTAAA GTTTCCAGGG CACAATTGAG ATCCTTGAGG
36901 TACAGTTCAT CCATGCAGAC CTAGCACCTG CTTTAGGTAA GGGCTCTTGT
36951 TACTTCTTGT TCTTATCGGG TTCTTATGTT CAGCTCAGCT TCCTGCTTCC
37001 TCAGAGAGAA GTGGTAGGTT CTGTTTTAGG CTTTTCTTTT TTGGTGGTGG
37051 TGGGAGGTGT CAAACCGCAT TATTGAGGGG AGTGGGGGTG GTAAAGCAGT
37101 GGTGAGGACG ATGAGAAGCG ACCTCCTTAG CCAGGCCAGG AGCTCACCTC
37151 CCAGACCCTG CCCTTCAGGC ACTGAAAACT GTTTTAGGCT TTTCTGCATG
37201 GTTGGAGTTT ACTCTTAGTT GCTGACAGTC ACTCATCCCT TGGAGAGGGG
37251 TACTGAGCAT AATCACTGTT GGTATTTTAT TTACTACCAG TTCTTCATCA
37301 TTACCGAGAC TCATTCCATT TGGAAAATAA ACATTGCCTC ATCTGTTCAT
37351 GGTATATTTT TACACTTGCC TTTCACTCAC ATGTTGCATA TTAACTGAAA
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FIGURE 3-11

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37401 AGATCAGCAT GATCTTGGAG CCTAATGTGA TCTGGATCTT ATTACCATGT
37451 ATGTTTTTAT CGTCAGGTGC TGCTTTGGAC TCTGGCCCAT TCCTCCCACC
37501 TGTCTTCATC CTGTCGGGGT TGATCTCTGC CTGGTTCCAT AGTCACTTGG
37551 CTTTTGGAGT TTTATTTCTT CTCTAACCCA CTCTTCCCTT CCCTGTCAAA
37601 TATAATTCTC TCATGAGCAA CTGTGCCTGA TAATCCCAGT GTATAGGCCA
37651 TAGCTCAGGT TGTTTTAATG CTTGCAAGGA AGTCTCTTCA GATTACTACA
37701 GGGTAAAAGA ATCCATTCCC TTTCAACCTC TCATTACTTA CTGAATCAAT
37751 TATTTATTTA CTTGTGTAAT TCACATCCAT GCTCAGGTAT GTGTTTAGTT
37801 TACCTCTGAG ACTGTGGCTC CCTCTAGACA AGGGTCTTTG TCTGGTATTA
37851 GTCCACTTCC TCAGTGTCTA ATTTCATGAG GACAGAATCA GGGCAAGACC
37901 TACTGGCTAA GACTTGCTGC TGCCTCAGTT ATTTGGTTTA CTGTTTAAGC
37951 CCTTGAGCCA GGAGGTGACA GTATCTTTTG TGTTCCAAGT CAGATAACCA
38001 GTAACAGTAA TATTCTGATG TAGGTCTAAG GGGCAATAGG AGCCTGAATC
38051 TGAGCCCCTT GGCAGGGATG GTTTCCCTGG GTTACTGGAT TTGAGTCTTT
38101 GTCTTCCGTA ATAGTAACTT CTGTGACCCT TGGCTCAAGG AGTCCTTTCT
38151 AACCTAAATG CCCTCCTGAA GAAAGTGCTG ATATTCATCA GAAAAAAAAG
38201 TAGGGTTTGT GTTATGTTAC CATCTGGGAG ACATTGGCTT TAATCCTCTC
38251 CCCTCTTCTT TTCCTTTTAA AATTTTCAAG AATCCCCAGA ATTGAGGGTC
38301 AATCCTGGAT CAGAAGGGGC AGAAAAGTCA GCCAGTCAGA GGTGAGAAAG
38351 GGGTCTTGTG TTCCAGTTGC TCTACTTTAG AGGGCTTGAG GGCCGCATTA
38401 GGAGCAAACC AAATACTCTG AGGTCCTAGG AGAAGATTGC TCTAAATCCA
38451 GGATGATTTC ATCATATGAC TTGAGATGGA GGGGTTCTTG ATTAGTAATG
38501 GGCTTTTTGA TTGGCAGGAA GTAGGTAAAC TGCAGGCAAT AGGATTGGCC
38551 ATAGAAATAT AGGGAACTCT ATGCTTTCAA CTCTTGTGAA GTTAGGACCA
38601 AACCAAATTA TTTGGGGTTC ATTGGTGGCT AAGAAATTAA CTTTTATACT
38651 TATAGTTAAA AAAAAAAAAC TTAAAGAACT TTTATTAATT CTTCCCCAAT
38701 AGAGTGATTT TTTTTTTTTT TTAAGAGACG GAGTCTGGCT CTGTTGCTCA
38751 GGCTGGAGTG CAGTGGTGCA ATCATGGCCA CGGCTCACTG CAGCCTTGAC
38801 CTCCCCAGGCT CAAGTGACCC TCCCACCTCA GCCTCCTGAA GTAGCTAGGA
38851 CTACAGGCGT GCACCACCAC ACCCAGCTAA TTTTTGTATT TTTTGCAGAG
38901 ATGAGATTTT GTCATGTTGC CCAGGATAGT CTCCAACTCC TGGGCTCGGG
38951 CCATCTGCCC GCCTTGGCCT TCCAAAGTGC TGGGATTACA GGCATGAGAC
39001 ACCATGCCCA GCCAGAATGA TTTTCCTTTG TTGAATTCTC AAAATTTTAT
39051 TCTGGCTTAG GTAATTGAGT AGGAATGGCA GAGAGTAATA ATTTTCAGTG
39101 TAATCTTTAG CATTACATAA ACCTCTACAA ACATGAAGTA AAAAGTTCTT
39151 TACAGACTTT CTATAGGAAA AATAAATGTT TATAGATCTG CTTATCAACT
39201 GTTTGTTCTT CCTACCTCTG CATTTTCATC TATTGATAAC TGTCAGAGTT
39251 CAAGGTCAGT TAATTGTACA TTTTCTGGGA GTTTTTCTCA CTGTTAATTA
39301 GTAAGACTTT GAATCATTAA GTGCTGATGA CTACATGGCA CAATTCATTA
39351 AAGACAGTCA TACTTTAACC TTAGTACAGC TATAATGGGA CGGTGAAATA
39401 CAACTAGGAA AGTATCTTAT TAAAGTATTT TACATTTTAC TAATAAAATT
39451 TATTTAAACC CTGAATTAGT GTTTATTTTT GTTTCCGAAT TCTCAGTAAC
39501 ATCTCAGTAG ATCCGTGAAT CCTGCCAAAA GACGTATTTT AATCCAAAGA
39551 TCTTTCTGCA TCTATAATTT ACCACACTAA AGCTCACATT ATCATTAAAA
39601 GCAGCATTAT CATTAAATTG TAGACATTTA TTAGTTCATC TCCAGGCCTA
39651 ATGGGAGTGG TTTGGAGTAA ACCTTTGTAG AAACAATAAT ATGTTTTGAT
39701 AAATGCATAT GGGCGTGGAG TGGTTATCAC TTACCTCCTC ATGAAATTTC
39751 TGGAAAGGTG ATCCGGAAAA CCAGGACACA TTTATGGTAA GATATAACAC
39801 CTTACCATAA CGATTAAGGC TCATTGAAAA ACTCTGACTT AATGAGTTTA
39851 CCAAAAAACT GTTCTATCCA CATCTCATCA AACCGCCCCT GAAATTCCCT
39901 TGCCTCTGTT AAATTTTTCT AGACAGTCTG AATAGAGGCA TGTAATTTTT
39951 TTGGATTTTT CTGTGGTTAA ATAAATATCC TTTACAACTC TCTTTATTCT
40001 TGAATATCCA TAAGAGTTTA TATTTATACT GTATGTTTGT TATTAGGATT
40051 CCTTTCAATT GCTATATAAA AAATGTAAAG TCTGTTTACT GCCTTAAACC
40101 TTCTGGTGTA TTTTTATATA AAGTAACACC CTTAATTCTA ACTTGGCCAA
40151 CAGGTAGGAT GGTATTATTA TTATCTTCAT TGTACAGATA AGGAAACTGA
40201 GGCTCAGATT GACTAGATCA AACAGGAGTT TTCTGGAAAA CCTAGGACAC
40251 AAGCCTAAAT CTTTGAACTC AAATACTGCT CTACACTGAA TTACAGTTAT
40301 ATACTGATTT CTGTTGTAAA TTCTTAGAGA AGACAGACAT AGAAATTAGT
40351 AACTTGAGTC AGTAGCGGCT TTGTTCAAAC ACAGGCACAT GCATATTTTA
40401 TGGTATATGT TTATATCTGT GTAATACTCA TCATAAATGT CAGATTTATA
40451 ATCGATAGTG CCCATTTCTA AATTTATAGT TGAAACCTCT GATAGGAATT
40501 AGGAATTATC TTAAAGTCCT AGAATAATAA ATATTAAGAT TTTGAAGACT
40551 GCTTAAAACA GTGTTCCAGG CTGGATTTTT TCCTTAGTTT TTTTTTCCTT
40601 AGTTTTTTAC CTTAGTTTTT TCCATGTAAT GAATGAGGAG CCATTGGGGT
40651 TGGTGTTTGG TTGTAAAGGG CAGGTTGACT TCACCAGGAG GTGTTTCTTG
40701 GTATTTATGG ATCCTCTTTT TCACACTAAT CCTTTGATTA GCTTCTTCTT
40751 ATAGTTCATG CTTGTACAGT TGCAGCTGAA TGGTAAGTAG GTAGAAATAT
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FIGURE 3-12

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40801 GCATTGACTA ATGTTGAACT ATATCTAGGA GCGTCATATT CATGCTACTA
40851 CTGAGCACTG TGACCTAGGT GAAGTGTGAG ATTAAAGAGC TTTATTGCTT
40901 ACCACGTTTC TTTTTGATCT AGTTAGAGTC ATGTGAGGCA GTCCATGACT
40951 TTTAGGATGT TATAATATAA TCCACATAGT ACTTTATACT TTTCAATTTG
41001 TTTTTATATA TTTTTTCCTTA CTATAAGCCT GTCAAGTCTA GTGAGATGAC
41051 ATGGTTATTA ATATATTACA AATGAAGAAC TCTGACTTGG AGGTAGTATA
41101 GCACTGTGGT TAATAATAGA AGTTCTTATA TTTTTATATG AATTATATAT
41151 TATGAACCAG ACCAGAATAC TAGCTCTACC AATTACCTAG CTGAGTGATG
41201 GTGCAGCAAC TTAATCTCTC AAAGCCCTGG TTTTCTCATT GTAAAATGGA
41251 GGACCTTATA GGATTGTTGG GTAGCTTAAA TGAGATAATA GGTAGAATTA
41301 AAAGTAACGG CAAAAACCGC AATTACTTTT GCACCAACCT GATATTTAGA
41351 ACAGTGGAGG CATATAGTAG GCATTCAATA AATATTGGTA GTATTATTTT
41401 CAGAGGTTAT TACTCATTTA ACTCAACAAA AATTGAGAGC CCCTTTCTAT
41451 ACGCTAGTCA TTGTGCTAGG CATCAGGAGC ACAGGGCAAA CCTGGTAGGG
41501 TGCTTACTCT GATGGAATTT ACATTTTAGT GGTAGAAATG GTAAATGAGT
41551 CAACAAGAAT TTTATGGAGT GACAAGGACT TTGAGGAAAG TAAAACGGGA
41601 CAATGCTTGA GAAGGGTGCT AGTTGGGAAG TCCTATCACA CGAAGTGGTA
41651 TTTGATCTGA GACCTGAGTG ACCATAGCCA CATGAATACC TGGGGGAATC
41701 ACTTCCCAGG AGGAAACAGA AGCACAGAAG CCGAAAGGCA GGATCACAGG
41751 CGGCACATTT TATTGGTGCA GTGTGGAGGT AGAGGGACTG GATTGTGTAG
41801 GGTTTGTAGG CCAGGGTAAA GAGCTTGGAT TTCTTCTGAG TGTAGGATTT
41851 TGAGCAGGGG AGTGATGTGT CTTATTTTGG GCGGGCGCTA GGCCAGGTAC
41901 TGTGAAGGAA ATAATGGTAT AGAAGAAATA TGTCTTTCTT GCTAGAATCT
41951 TATGTGACAT ACAACTAGTG GTGGCTGATC AGCAATTAGA ACTGCAGTGT
42001 TCTTGCTGGT GTACTCCTAA TCTGATCATT GGATGATATT TATCACGTAT
42051 TTTTGCAGCA GTCATCTCTA AAGTGGCATT ATGGTTCTAG TTATCTATCA
42101 TTGGATCTGT TTGCTCTAAC AGTCCGAAGG GGCATGAAGG GTGGAAACAG
42151 AGTAGAGGGA AATGGGTGAA AAGGCTATTT CTAAACACTA GACACAAAAT
42201 AGGGATTAGG AAGTAGTGGG GGTTAGGAGA AAAAGCAAAA TCCTGTTGTG
42251 CATGGAGAGG GACATTGTTG AAACTGTGGC TTCTTGAGAT TACATGAGTG
42301 AACCTGCGTG GACTGGGTCG TCTTCCCTAT TCACCAAGCT GAATCCAGGC
42351 CCAATCCAAG ATTACTGCTG CCTTTGCTCT GAGGCTTTAG ACTGTTAGTA
42401 GCTTTTCTCG TCTCTACTGA GGCCAAAAGG GGCAGTGATA CCCTTGAATT
42451 TTCTTCTTAA AACAGGGTTT CATTTCCTTG GAAGTTTGTT TCTTTGAATC
42501 TTTCTGTCAG TTTAACTGTT ATCATCAATT GGTTAGCATT CTAATAATAA
42551 TTATAATTAT AGTAAACATT TATTGAGTGC TTACGAAGAG CCAGTTCCAA
42601 GCTTTTTTAT CTCCATTATT CTGCTACTTT CCTTCTCATT TTACAGATGA
42651 GGAAAATGAG GCACAGAGTG GTTAATTAAT CTGTTTGAGG TCCCGTAGCA
42701 GGTCAGTGAT GCCAGGGTTC AAACCTACAC TTAACTCTAC ACTAGAGACT
42751 GTTTTCTTAA TTATTTCTTC ACAATCATAT GTTTAATGAT TACTTATTGA
42801 TTATTTAGTG GTCTGATAAG AAGAGGGAGC GGTGCTCTTC TGTTGGAGAA
42851 GAAAGGCTGG CTGATCAAGA CACACTGGTT GGTTTGAAGA AAAAATATAG
42901 ATGTTAATTC CATAACACCA CACTCTAAAC ATTTCTACTG GACGAGTTCC
42951 ACCTGTGTGC CACTCGAAGT CGGATGCAGT AAGGAAGGCT TTTTATTGAG
43001 GAGAGAACGA ATACCTCTGT ATTCAAAAGA GAGTGTGTTG TTCCTTATAG
43051 AAGATGGAAG GGGGCTTGCC AGTGACAGAT TATGATGATT ACCTCCTTAG
43101 TGGTTTTTTT TTATTGCACA GACTATAATA ATAATTATAA AAATTTGTAA
43151 ATCAAGAAAA ATCTTTACCC CAACAAATTG TTTTTATATT TTTCATATTC
43201 ATATTTTTTC ATATTCATTT TATTTTTTCA TATTCAAAAA TAAAACAATT
43251 TTCATATTCA TTTCAATTGT TTATTTTTTC ATATTCAAAA ATAAAACAAT
43301 TTTCATATTC ATTTCAATTG TTTTATTTTT TCATATTTTT CATATTTCAT
43351 ATTTTTTCAT TTTTATACAC AGTTATAGAG TATCTACTTA TTTTTCATTT
43401 AACATTATGC TATAACAGGT TTTAAAGTTA GGCAGTAAGT CTTTCCAGTG
43451 AAAAGGAAAA GACTGAAACA TGAAAAGGTT ACGAGGCATT ACTAATTGAT
43501 TGGAATGATG CCTACCAGGC AGCCCATGTC AGTTTTGGAG CTGGCCTTGG
43551 AAGGAACAGC TGTGTATTTG GACCTTGGAG CAGTCTGTCA GGCTTCCAAG
43601 AAAGTGGGCA AAGAAGGAAG GGGGGTTGGG GGCACAAGTG GAAAAGTACA
43651 GTGGTTTGGA ACTGATGTGA AACTATCAAG CTGGTTGAGT TCAGTGTTAG
43701 AAAATAGGAA AAACAAAACA ATTTCTACCT GATATGGTAC TTTAATTGAG
43751 GTTAGCACTT CAGTGAATAG GCAATGCATT ATAATTTGTC AGAATTATCA
43801 ATATTTTGTT CTTGTCAGTG GCTTTATATT TAATAGTTAC ATGTTATAAA
43851 GCCAGTTTTA TCAGTGAAAG AACAAGTTC TTGACAAATG CTATTTTAGT
43901 GATAAAGCTG TTATTCTGTA TTTAAATTCA GTTTAACTCA AAGTGGTTTT
43951 TAAGTTTTAC ATTTGTATAA CTGTAGACTA GCCATATGGC ATTCAAAGGC
44001 CTCCAAGATA TAACTTGAGA CACTCTTAGG ATGGAATCCC ATATTCAGAA
44051 TCTTTACTGA CAGCTCCCCA TATCCAAATT GCCTTTTCTC TCTTGGGCCT
44101 CTGGGTGTGA CAAGGGACAA CTTGAGTGAA AGGCCACAGG ACAAAGTAGA
44151 GATGCTGTTA AATCTCAATG CAGAAGGCCT GAGACAACTG ATAGAGACAA
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FIGURE 3-13

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44201 TTGTTTCTCT TTTCTCCCTC ATAAAATAAG TAAAATTCAA AGTGATTTTT
44251 TTTTAATTTT TTGCTTTGAC ACATTGTGTT TAGTCTGATT GAGGTCATCT
44301 TACACAACAG AATCCAAAAT CCTGAGAAAA TAATTTATAC AACTAGAATT
44351 CCAAAATTAG GTTTTGCATT AAGTTCAAGC TATCATTTCT TTAAGAAAAC
44401 CTACACTGGA GTTACCAACT GGAATATTTG GTTATGAGAC ACAGTCATCA
44451 TGTCAGAGTA TGTAGTTTGC TTCTAACACT TATTTGTGTG CTTTTAAGAC
44501 CTGCTCCCTG CCACACTTTA TCATAACAAA AAACAAGAGA CACATGTTAG
44551 TACTGTAGCA TGTATAGTCA TGGGGAATGT GTTCTAAACG AAATCCCATC
44601 ACAGTGGAGT CAACACAATA TTTCTAGGGG AGAAGGTCTT CCTGTTAAAC
44651 TCATGTGAAG GCATTCTTCT CTACTATGGG AACTTGTTTA TGTGCCCTCT
44701 AGAAGACAGC TGAGATGGTC TTCAGTGAAT CTGTTCACTG ACATGTTGCT
44751 AGTTTCTTTA TGTTTACATG TAAACAGTGC TTAGAAGCAT CTTTCCCCAA
44801 GCTGTTCTTT TTTTGATGGA CTCCCCCTTT TTGGGGGAGT ATCAGTTGAA
44851 TGAGCACTGT TGTACTCTCA GCACTAGACA TTCTGTTATG TGTGTGTGGA
44901 GCTTCCTTGT GGCTTGGTAG CATTACCTCT GCATTACATG CTGCAGCCTC
44951 ACCAGGCAGA AGGGCCATTC ACTTCTGCTG CTACTTACCA GCACCTCTGT
45001 TTCCTCGAGT GTGTTACCCT CCCACCCCT GGGCCTTGGA CCTGGGTCCG
45051 TTGGGCTATT ATCCATGCTC CCACCTGCCC ATCTCTGCTC TGATATAATC
45101 TACTAGGATA ATAAAGTAGC TTTTCCCTAC CATAATGTTT TTTAAATAGA
45151 CATACAGCAA TGTATAATGG TTAAGAGCAT GATCCAAACT GTGTCTGATT
45201 TTGAATCCTG GCTGAGTTAC TAGCTATGTA ATCTTGAGAA AACTACTCAA
45251 TCTCTCTGTG CCTTAATTTT CTTAGGTATA AAGCAGATAC TAATTATGCC
45301 ATCATAGGGT AGGTATGAGG ATTAAATGAG TGAGTATTTG TAAAACACTT
45351 AAAACAGTGA CTGACTTGGG CTACCCCTTT TGGGTCCCCT CCCTTTGTAT
45401 GGGAGCTCTG TTTTCACTCT ATTAAATCTT GCAACTTCAC ACTCTTCCAG
45451 TCTGTGTTTG TTATGGCTCA AGCTGAGCTT TCGCTCGCTG TCCACCACTG
45501 CTGTTTGCTG CCATCGCAGA CCCGCCGCTG ACTTCCACCC CTCTGGATCC
45551 GGCAGGGTGT CCACTGCACC TCTGGTCCAG CGAGGTGGTG CCCATTGCCG
45601 CTCCCAATCG GGCTAGGGGC TTGCCATTGT TCCTGCACGG GCTAAGTGCC
45651 CTGGGTTCAT GCTAATTGAG CTGAATAGAG CTGTAACACT CACTGTATGG
45701 CCCAAGGTTC CATTCCTTGG AATCTGTGAG GCCAAGAACC CCAGGTCAGA
45751 GAAGAAGAGG CTTGCCCGCCA TCTTGGAAGC AGCCCGCCAC CATCTTGGGA
45801 GCTCTAAGAA CAAGGACCCC CCGGTAACAT TTTGGCCACC ATGAAGGGAC
45851 TTCCAAAGCG GTGAGTAATA TGGGACCACT TTTGCTTGCT GTTCTGCCCT
45901 ATTCTTCATT GGAATTGGAG GAAAATACCG GGCACCTGTC AGCTGGTTAA
45951 AAACAATTAG CATGGCCACC AGACTTAAGA CTCAGGTGTG AGGCTGTCTG
46001 GGGAAGGGCT GTCTAACAGC CCCCAACCCT TCTGGGTTGG GAGCGTTGGG
46051 CTGTCTGGAA CCAGCTTCCA CTTTCAGTTT TCCTGGGGAA GCTGAGGGCC
46101 GACTAGAGGC AGAAAGCTGT TGTCCTGAAC TCCTGGTGTT AGCTGGTTGA
46151 GATCATGGCG CAGCCAGAAG TCTCTACTCA ACAGTCAGCC ATGCGTGCAC
46201 CCCTACCTTT CCTTCTGACC TATACCTCTT GGTCCTGACC ACAACTTGCT
46251 TGAAAGTGTA GCCCCAAAAT TCTCCTTACC TCTGAATCTA CTTCCTCCAA
46301 TCCCTGCCTC CTAGGTACTA ATGGTTCAGA CCTTCATTTC CTCTAGCAAG
46351 CTGTATCTCC AAAGGGATCT AAGGAAGCTC TATGCTGTGT CCTTAAGCCC
46401 CTAGGCTCTG AACCCAGATA GTCTTGTCCC TGGTGTCCCT CCCAATTTAG
46451 GCATACAGCT CTCAACATGG GCAGTTATGT AGGACCTGTT CCCCACCATC
46501 CTTGCCAGGG TCCCAGGTTT GTAAAGGGCT AGGAGAAGAG AGAGAGAGAG
46551 AGAGACAGAG ACAGAGGGGA GAGAAAGAGA GAGAGACGAA GAGGGAGTCA
46601 AAGAGAAAAA GAAAGAGAAA GATAGAAGTA GTAAAGAAAA AATAGTGTGC
46651 CCTATTCCTT TAAAAGCCAG AGTAAATTTA AAACCTATAA TTGATAATTG
46701 AAGGTCTTCT CCTGACCCTG TAACACTCCA ATACCACTTT ATTGTCAGTG
46751 TAAACAAGGG GGTAGCCCAA AAACACTGAG ACCACTGACA ACCTATCAAA
46801 ATCCTATCAA AAATCCGTAA CCCAGTAACA CGTGGATGGG CCAAAGGCAT
46851 TCAGTCGGTA GCGGCAACTG CTTTGCTAAA AGTAGAAAAA TAACTTTAGA
46901 GGAAACCTCA TTGTGAGTAC ACCTCACCAG TTCAAAACTA TCCTAAGTCA
46951 AAAAAGCAAA AAGGTAACTT ACTAACTCGA AAATCTTAAA ATATGGGGCT
47001 CTTCTGTTAG AATAAAGGTA ACTTATTAAC CACTGAAAAT TCCCTTAACC
47051 CAGCAGATTT CCTAACAGGG GATTTAAATC TTAATTACCA TACAAAGGTC
47101 CGACAGATCT AGGAGGAACT CCCTTCAGGA CAGGATGATA GATGGTTCCT
47151 CCCAGGTAAT TGAGGGAAAA AACCACAATG GGTATTTAGT AATTGATAGG
47201 GAAACTCTTG TAGAAGCAGA GTTAGGAAAA TTGCCTAATA ATTGGTCTGC
47251 TCAAACATGC GAGCTATTTG CACTCAGCCA AGCCTTAAAG TGTTTACAGA
47301 ATCAAAAAAA CTCAATCTCA ATCCTGACTC AAAAGGTTAC CTACACCCTC
47351 TCTGAAATGA ATTTGCATAA GAACTGTTGT TTATGGGAAT GCATCTTGAT
47401 GGGGCAACTG GGTTGTTATG AAATACTCAG GAACCCAGCC CAGCTCCAGG
47451 ACTCACCCCT GAGCAAAAAA GCAATGTTGG GCACTCTGGT AAAGGACCAC
47501 TAGAATCCAG CAGCCTGGAC CCCTTTCTTT GTGGTCAAGA AAGGCAGGAA
47551 AAGGGGTGCA GGACTGCTAC ATCAGTGAGT GCAACTAATC TGATAAGCAG
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FIGURE 3-14

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47601 AGGTCCATGG GTGGTTACAC ACCCTGGAAA GGAATAAACA TTAGGACCAT
47651 AGAGAACGCT CTAGGACTAA TGCTCATTGG AAAATGACTA GGGGTGCTGG
47701 CATCCCTATG TCCTTTTTTC AGATAGGAAA TGTTCCCCCC AAGGCAAAAA
47751 TGCCCGTAAG ATATATTCTG GAGAATTGGG ACCAATTTGA CTCTCAGATG
47801 CTAAGAAAGA AATGACTTAC ATTCCTCTGC AGTACCACCT GGCCATGATG
47851 TCCTCTTCAA GGGGGAGAAA CCTGGCCTCC TGAGGGAAGT ATAAATTATA
47901 ACACCATCTT ACAACTAGAC CTCTTTTGTA GAAAAGAAGG CAAATGGAGT
47951 GAAGTGCCAT ATGTACAAAC TTTCTTTTCA TTAAGAGACA ACTTGCAATT
48001 ATGTAAAAAG TATGATTTAT GCCCTACAGG AAGCCCTCAG AGTCTACCTC
48051 CCTAACCTGA TGTCCCCCTG ACTCCTTCCC CAACTAATAA GGACCCCCCT
48101 TTCAACCCAA ACAGTCCAAA AGGACATAGA CAAAGGAGTA AACAATGAAC
48151 CAAAGAGTGC CAATATTCCC TGGTTATGCA CCCTCCAAGC GGTGGGAGAA
48201 GAATTCGGCC CAGCCAGAGT GCATGTACCT TTTTCTCTCT CACACTTGAA
48251 GCAAATTAAA ATAGACCTAG GTAAATTCTC AGATAACCCT GATGGCTATA
48301 TTGATGTTTT ACAAGGATTA GGACAATCCT TTGATCTGAC ATGGAGAGAT
48351 ATAATATTAC TGCTAAATCA GACGCTAACC TCAAATGAGA GAAGTGCTGC
48401 CATAACTGGA GCCCGAGAGT TTGGCAATCT CTGGTATCTC AGTCAGGTCA
48451 ATGATAGGAT GACAACGGAG GAAAGAGAAC GATTCCCCAC AGGGCAGCAG
48501 GCAGTTCCCA GTGTGTAGCTCC TCATTGGGAC ACAGAATCAG AAGATGGAGA
48551 TTGGTGCCGC AGACATTTGC TAACTTGCGT GCTAGAAGGA CTAAGGAAAA
48601 CTAGGAAGAA GCCTATGAAT TATTCAATGA TGTCCACTAT AACACAGGGA
48651 AAGAAAGAAA ATCCTACCAC CTTTCTGGAG AGACTAAGGG AGGCATTGAC
48701 AAAGCATATC TCTCTGTCAC CTGACTCTAT TGAAGGCCAA CTAATCTTAA
48751 AGGAAAAGTT TATCACTCAG TCAGCTGCAG ATATTAGAAA AAAACTTCCA
48801 AAGTCCGCCT TAGGCCCGGA GCAAAAGTTA GAAACCCTAC TGAACTTGGC
48851 AACCTCGGTT TTTTATAATA GAGATCAGGA GGAGCAGGCA GAATGGGACA
48901 AATGGGATAA AAAAAAAAAG GCCACTGCTT TAGTCATGGC CCTCAGGCAA
48951 GCGGACTTTG GAGGCTCTGG AAAAGGGAAA AGCTGGGCAA ATAGAATGCC
49001 TAATAGGGCT TGCTTCCAGT GCGGTCTCAA GGACACTTTA AAAAAGATTA
49051 TCCAAATAGA AATAAGCCAC TCCCTTGTCC ATGCCCCTTA TATCAAGGGA
49101 ATCACTGTAA GGCCCACTGC CCCAGGGGAC GTAGGTCCTC TGAGTCAGAA
49151 GCCACTAACC AGATGATCCA GCAGCAGGAC TGAGGGTGCC TGGGGCAAGC
49201 ACCAGCCCAT GCCATCACCC TCACAGAGCC CTGGGTATGC TTGACCATTG
49251 AGGGCCAGGA GGCTAACTGT CTCCTGGACA CTGGTGTGGC CTTCTCAGTC
49301 TTACTCTCCT GTCCCGGACA ACTGGCCTCC ATATCTGTCA CTATCCCAGG
49351 ACAGCCAGTC ACTAGATACT TCTCCCAGCC ACTAAGTTGT GACTGGGGAA
49401 CTTTACTGTT TTCACATGCT TTTCTAATTG TACCTGAAAG CCCCACTCCC
49451 TTGTTAGGGA GAGACATTCT AGCAAAAGCA GGGGCCATTA TACACCTGAA
49501 CATAGGAGAA GGAACACCCA TTTGTTGTCC CCTGCTGGAG GAAGGAATTA
49551 ATCCTGAAGT CTGGGCAACA GAAGGACAAT ACGGATGAGC AAAGAATGCC
49601 CATCTTGTTC AAGTTAAACT AAAGGATTCT GCCTCCTTTC CCTACCAAAG
49651 GCAGTACCCC CTTAGACCGG AGGCCCACCA AGGACTCCAA AAGATTGTTA
49701 AGGACCTAAA AGCCCAAGGC CTAGTAAAAG CATGCAGTAG CCCCTGCAGT
49751 ACTCCAACTT TACGAGTACA GAAACCCAAC AGACAGTGGA GGTTAGTGCA
49801 AGATCTCAGG ATTATCAATG AGGCCATTGT CCCTCTATAC CCAGCTGTAC
49851 CTAATCCTTA TATTCCGCTT TCCCAAATAC TAGAGGAAGC AAAGTGGTTT
49901 ACAGTCCTGG ACCTTAAGGA TGCCTTTTTC TGCACTCCTA TACATGCTGA
49951 CTCTCAATTC TTGTTTGCCT TTGAAGATCC TGGAACCCCA ACATCTCAAC
50001 TCACCTGGAC TGTTTTACCC CAAGGATTCA GGGATAGCCC CCATCTATTT
50051 GGCCAGGCAT TAGCCCAAGA CTTGAGCCAG TTCTCATACC TGGATATTCT
50101 TGTCCTTTGG TATGCGGATG ATTTACTTTT AGCCGCCCGT TCAGAAACCT
50151 TGTGCCATCA AGCCACCCAA GTGCTCTTAA ATTTCCTCGC CACCTGTGGC
50201 TACAAGGTTT CCAAACCAAA GGCTCAGCTC TGCTCACAGC AGAGGGCTAT
50251 TTATCCCTAA ATACTTAGGG CTAAAATTAT CCAAAGGCAC CAGGGCCCTC
50301 AGTGAGGAAT GTATCCAGCC TATACTGGCT TATCCTTATC CCAAAACCCT
50351 AAAACAACTA AGAAGGTTCC TTGGCATAAT AGGCATAACA GGCATAACAG
50401 GTTTCTGCTG AATATGGATT CCCAAGTACG CAAAATAGC CAGACCATTA
50451 TATACACTAA TTAAGGAAAC TCAGAAAGCC AATACCCATT TAGTAAGATG
50501 GACACCTGAA GCAGAGGCAG CTTTCCAGGC CGTAAAGAAC ACCCTAACCC
50551 AAGCCCCAGT GTTAAGCTTG CCAGCGGGGC AAGACTTTTC TTTCTATGTC
50601 ACAGAAAAAA TAGGAATAGC TCTAGGAGTC CTTACACAGG TCCGAGGGAC
50651 CAGCTTGCAA CCCATGGCAT ACCTGAGTAA GGAAATTGAT GTAGTGGCAA
50701 AGGGTTGGCC TCATTGTTTA CGGGTAGTGG CGGCAGTAGC AGTCTTAGTA
50751 TCTGAAGCAG TTAAAATAAT ACAAGGAAGA GATCTTACTG TGTGAACCTC
50801 TCATGATGTG AACCGCATAC TCACTGCTAA AGAAGACTGG TGGCTGTCAG
50851 ACAACTGTTT GCTTAAATAT CAGGCTCTAT TACTTGAAGG GCCAGTGCTG
50901 TGACTGCGCA CTTGTGCAAC TCTTAACCCA GCGACATTTC TTCCAGACAA
50951 TGAAGAAAAG ATAGAACAGA ACTGTCAACA AGTAATTGCT CAAACCTACG
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FIGURE 3-15

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51001 CCGCTTGAGG GGACCTTCTA GTGGTTCCCT TGACTGATCC CAACCTCAAC
51051 TTGTATACTG ATGAAAGTTC CTTTGTAGAA AAAGGACTTC GAAAAGCAGA
51101 GTGTGTAGTG GTCAGTGATA ATGGAATACT TGAAAGTAAT CCTCTGACTC
51151 CAGGAACTAG TGCTCAGCTG GCAGAACTAA TAGCCCTCAC TCAGGCACTA
51201 GAATTAGGAG AAGGAAAAAG GGCAAATATA TATACAGACT CTAAGTATGC
51251 TTACCTAGTC CTCCATGCTC ACGCAGCAAT ATGGAGAGAA AGGGAATTCC
51301 TAACTTCTGA GGGAACCCCT ATCAAACATC AGGAAGCCAT TAAGAAACTA
51351 TTATTGGCTG CACAGAAATC TAAAGAAGTG GCAGTCTTAC ACTGCTGTAA
51401 GAAAGGACAG AGAAATAAAA GGGAACCCGCC GAGTGGATAT TGAAGCCGAA
51451 AGAGCCACAA GGCGGGACCC TCCATTAGAA ATGCTTATAG AAGAACCGCT
51501 AGTATGGGGT AATCCCCTCC AAGAAACCAA GCCCCAGTAC TCAGAAGAAG
51551 AAATAGAATG GGAAACCTCA TGAGGACGTA GTTTCCTCCT CAGGATGGCT
51601 AGCCACCAAA GAAGGAAAAA TACTTTTGCC TGCAGCTAAC CAATGGAAAT
51651 TACTTAAAAC CCTTCACTTA GGCATTGATA GCACCCATCA GATGGCCAAA
51701 TCATTATTTA CTGGACCAGG CCTTTTCAAA ACTATGAAGC AGATAGTCAG
51751 AGCCTGTGAA GTGTGCCAAA AAATAATCCC CTGCACTTCA GGCCATGCAT
51801 TTCAATCCCT GAATCTTTAA CCTCCTTGTT AAGTTTGTCT CTTACAGAAT
51851 TGAAGCTGTA AAGCTACAAA TGGTTCTTCA AATGGATCCC CAGATGCAGT
51901 CTATGACTCA AATCTACCGC GGACCCTTGG ACCGGCCTGC TAGTCCATGC
51951 TTCGATGTTG ATGATATCAA AGGCACCCCT CCCGAGGAAA TCTCAAGTGC
52001 ATGACCCTTA GTTGCACCAG TTCAGCAGGA AGCAGTTAGA GCGGCCGTTG
52051 GCCAACCTCC CCAATAGTAC TTGGGTTTTC CTGTTGAGAG GGGTTGCTGA
52101 GAGACAGGAC TAGCTGGATT TCCTAGGCCG ACTAAGAATC CCTAAGCCTA
52151 GCTGGGAAGG TGACTGCATC CACCTTTAAA CACGGGGCTT GCAACGTAGC
52201 TCACACCCGA CCAATGAGGT AGTAAAGAGA GCTCACTAAA ATGCTAATTA
52251 GGCAAAAACA GGAAGTAAAG AAATAGCCCA TCATCTATCA CCTGAGAGCA
52301 CAGGGGGAGG GACAATGATC AGGATATAAA CCCAGGCGTT CTAGCCGGCA
52351 ACGGCTACCC TCTTTGGGTA CCCTCCCAAAC GTATGGGAGC TCTGTTTTCA
52401 CTCTATTAAA TCTTGCAACT GCACAAAAAC CAAACCAAAC CAAACCAAAC
52451 AAACAAAAAA ACAGTGACTG ACTTATGGTA AACATTATAT AAGCATAAAG
52501 TAAACCAAAT ACTTTTTTTC TAATTATAAA AGTCCTACAC TAACATTGCA
52551 GAAAACTTGA GGAATTCAGA AAAGTTATTA CTTAGTAAGA GTTGGAATGA
52601 ATAAATAAGT GGGTAGTTAG GATGGCAGGC ATGTGTTTTA GGCAGAGAGA
52651 TACAAGATAA AGAACTAAAA CTAGAATCTG GTCTTTGAAC CCCTGGCCTG
52701 ATTGTCTTAT TCATCATGAT GATTTGCCTA TTTTTCCAAT TTCTAAATCA
52751 TTCCTCTGCT GTTGACAAAG CAATAAATTG TTATATTTGA TAAGTGAATC
52801 TTCAGAGAAC TGGCCTTGAG CCAGCTCTAC AACTAACCAG CTCTGTGGCC
52851 CTTTGGAGAA TTTCTTAATA TTTGTAAACC TCAGCTTTCC TACCAGTGAA
52901 ATGAAGTTAG TCCTCCCTGT CCTGCAGGGT TGCTGCAAGG ATTTAACAAC
52951 ATGTATATGT ACAAACCACT TAGTCCTGTG CTTGGCCTAT TTGGTGCTTT
53001 TTTTTTTTCT TTTTTTTAAG ACAGGGTCTT GCTTGAATCT TGCTGAGGCT
53051 GGATTCAAAC TCCGGGGCTC AAGTGATCCT CCTGCCTCAG CCTTCCAAGT
53101 AGCTGGGACT ACAGGCCTGC ACCACTGTGC CTGGTGGCAG TGCTCGTTGA
53151 ATGTTCTTTT TCCTTAGTTC CTTCCTAGCT CTTCTGACAG TTTTGGGGCT
53201 TATGTATATA AGAAGGACTT GGTTGCCTCA GGGAGAGAGG ATGCAGTAGA
53251 GTTACATAGC TCACCTCACA TCCTCCAAAA GCTGAATTCA TAAGTAAACA
53301 AAGTGAGCAT TTCACCCATA CTTTACACAA AGTCTAGAAT ATTTATGGTG
53351 TCCCTCAGGC TCACATACTG TGACCTTCTG AGATACTTTT CCCTCTCCAT
53401 TCCCTTTCCT TCTCCCTGCT GGCTTTTTTT TTTCTTCTTC TTCTTTTTTT
53451 TTTTTTTTTA CTGTGAAAAA CAACCTATAT ACAGAATAGT ACAAAAACAT
53501 ACCTGTATAG TTTGAAGAGT AATTATTAAC AGTCTTATTA AGAAACAATG
53551 CTCCATCCAT GTTACTGCAA AAGACATGAC CTTATTCTTT TTCTTCTTAA
53601 TTTTTTTCTT TTTCTTTCTT TATTTTGGCC CTTTTTTCAGA TCTAGACCTG
53651 CAGAGATCTT GTTCTTTTTT TGAGACAGCA TCTCGCTCTG TCACCAGGCT
53701 GGAGTTCAGT GGCGTGATCT CGGCTCACTG CACCCTCTGC CTCCTGGGTT
53751 CAAGTGATTC CCCTGCCTCA GCCTCCTGAG TAGCTGGGAC TACAGGCGCG
53801 TGCCACCACA TCCAGCTAAT TTTTTTATTT TTAGTAGAGA CTGGGTTTCA
53851 TCATGTTGGC CAGGATGGTC TCAATCTCTT GACCTGGTGA TCTGCCTGCC
53901 TCGGCCCCCA AAAGTGCTGG AATTACAGGC ATGAGCCACC ACGCCCAGCC
53951 GATCTTGTTC TTTCTTATGA CTGTGTAGTA TTCCATGGTA TATATGTACC
54001 ACATTTTCTT TATGCATTCT ATCATTGATG GGCATCTAGG TTGATTCCAT
54051 GTCTGCTATT GTGAACAGTG CTGCAGTGAA CATTCACGTG CATGTGTCTT
54101 TGTGGTAGAC TGCTTTATAT TCCTCTGGGT ATATGCTCAG TAATAGGATT
54151 GCTGGATTGA ATGGTAGTTC TTCTTTTAGC TCTTTGAGGA TACTGCTTTC
54201 CACAATGGTT GAACTAACTT ACACTCATAC AGTATATAAG CATTCCTTTT
54251 TCTCTACAAC CTCGCCAGCA TCTGTTACTT TTTGACTTAT AGGTGGGAGC
54301 TAAATGATAA GAACTTATGA ATGTAAAGAA GGAAACAGAC ACTGGGGATCT
54351 ACTTGAGTGG GAAGAGTGGG AAGAGGGAGA GGAGCAAAAA AGATAACTCT
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FIGURE 3-16

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54401 TGGTTACTAA GCTTAATACT TGGACAATGT AATAATATGT ACAACAAACC
54451 CCTGTGACAC ATGTTTATCT ATGTAACAAA CCTTCACATG TACCCCTAAA
54501 CCTAATTTTT TTTAAAAGAA ACAGAATGCC AGCCAGGCAT AGAGGCTAAT
54551 TGCCTCTAAT CCCAGCACTT TGGGAGGGTG AGATGGGCAG ATCACTTGAG
54601 CCCAGGAGTT TAAGGCCAGC CCAGGCAACA TAGCAGAACC CCATCTCTTC
54651 AAAAAGTACA AAAATTAGCT GGGCATGGTG GTGTGCACCT GTAGTCCCAG
54701 CCCCTTGGGA GACTGAGCTG GGAGGATGGC TTGAGCCCAG GAGGTCAAGG
54751 CTGCAGTGAG CTGTGATCAT GCCACTGCAC TCCAGCCTGG GCGACACAGC
54801 AAGACCCTGT CTCCAAAAAA AAAAAGAAAA GGAACAGAAT GTTACCAGCC
54851 CAACTGCACT TCTTCACTCC CCCACCACTC TAATGAAGTC ATCACTAACC
54901 CACTTCTAAA GTACTCACAT ACCCTATGTC TATGGAGGTA TGTCAGTGGA
54951 GGCTAAGGTA TGCCAGTGGA GGCTTATGTA CCTTATGTCT AAATATTTAA
55001 AGTTATTAAA TTAAAAAACC ATTAAAATAT GCTTTCTACC TTGACAAACC
55051 TTTATAACAA AATTAGAAAA TGTTTAATGT TATGGCATTA AATAATTGAA
55101 AGCAAAATAT CAAAGATGAT AGAATTTAAT TAATTATTTT ATTTTATTTT
55151 ATTTGAGAGA GGGTCTTTCT GTGTCACCAA GGCTGGAGTG CAGTGATGCA
55201 ATCATGGTTC ACTGCAACCT CAACTTCCCG GGCTCCAGTG ATCCTCCCGC
55251 CTCAGCCTCC CAAGTGGTTG GGACTACAGA CATGTGCCAC CAAATCCAGC
55301 TAATTTTTAA ATTGTTTTTA ATAGAGGTAA GGGTCTCACT ATGTTGCCTA
55351 GGCCAGTCTC GAATTCCAGG GGCTCAAGGG ATCCTTTTGC CTTGTCCTCC
55401 CAGAGTGCTC GGATTTAAGT TGGGAGCCAC TATACCCACC CAACATAATT
55451 CAATTATTTA ATATTTCACA TGTTTTAGTA TTCCTTTGAT AGGGATGTGA
55501 TGTTTGGGTG AATAATAAAG TAAATCAAAG ACATATATTT GAAAATTATG
55551 TAGTTATTCT AAAAAATTAA TTATTTACCT TTATTTTAGC AAAATCAGTG
55601 TGTTAGCATA ATCAAGATAT TTTGGTATTC TAGTAACAAG ATCTAGTCAC
55651 AGTAATGATG TAAAGATTAA AAAATAAAAT ATAATAGGAA CCAGTATAAA
55701 CAAGTGGAAT TTAAATTTAA AATGCAATAC CAGCTGGGTG CGATGCCTCA
55751 CGCCTGTAAT CCCAGCACTT TGGGAGGCCA AGGCAGGCGG ATCACCTGGG
55801 GTCAGGAGTT CAAGACCAGC CTGACCAACA TGGAAAAACC CCATCTCTCC
55851 CAAAAATACA AAATAAGTTG GGTGTGGTGG TGCATGCCTG TAATCCCAGC
55901 TACTCGGGAG GCGGAGGCAG GAGAATCACT TGAACCAGGG AGGCAGAGGT
55951 TGTGATGAGC CGAGATCACA CCATTGCACT CCAGTTTGGG CAACAAGGGC
56001 AAAACTCTGT CTCAAAAACA AAAAGAAACA AAAAACACAG TACCATTTAC
56051 ATTAGCACCC CTCAAAATGA AATACTTAGG TATAAATCCA GCAAAATAGG
56101 TATAAGAGAT ATATAAGTAA AACTATAAAG CTCTGATGAA AGAAATAAAA
56151 GAACCAAATA AATGGACAGA TATTCCATGT TCATGGATAG GAAGACTCAG
56201 TAATGTCAAG ATGTCAGTCC TTTTCATCTT TATCTATAGA TTCATACAC
56251 TTCCAATCAA AATCCCCGCT AGTTATTTTG TGGATATTGA CAAACTGATT
56301 CTAAAGTTTA TGTGGACAGG CAAAAGACCC AAAATAGGTG ACATGCTATT
56351 GAAGCAGAAT AAAGTTAAAG TCTCTACTTC TTCTTCAATA TCATTTTCTT
56401 CAATATCAAA TCAACTCATT TTCTTCAATA TCAAGTCAAC TGTAGACTGA
56451 CAGTGTCCTA CTTCAAGACT TACTGTAAAG CTACAGTAAT CAGAACAGTA
56501 TGGTATTGGT GAAAGAATAG ACAAACAGAT CGATGGAACA GAATAGAGAG
56551 CCCAGAAATA GACCCAGACA AATACAGTTA ATCTTTGACA AAGGAGCAAA
56601 GGCAATAGAA TGGAGGAAAG ATACCCTTTT CAACAAATGC TGTTGGAATA
56651 ACTGGATGTC CACATGTAAA AAAATGAATC TAGACACAGA CCTTACACCC
56701 TTCACAAAAA TGAACACAAA ATGGATCATC AACCTAGACA TGAAACACAA
56751 AACTATACAA ATTTCTGCTC TGTGAAAGAC AATGTCAAGA GAATGAGAAG
56801 ACTTGGAAAA TATTTGCAAA AGACACATCT GATAAATGAT TCTTATCTAA
56851 AATATATAGG AACTCTTAAA ACTGAACAAT AAAAAAGAAA CCTGATTTTA
56901 AAATGTGCCA AACACTCTAA TAGATATCTC ATCAAAGAAG ATATATAGAT
56951 GGCAAATAAG CATATGCAAA GATGCTCCAC ATCATAGGTC ATCAGAAAAA
57001 TGCAAATTAA AATGATGAGA TTCTACTACA CACTTATTAG AATGGCCAAA
57051 ATCCAAAACA CTGACAACAC CAAGTGCTGG TGAGGATGTG GGACAACAGG
57101 AACTTTCATT TATTGCTGGT GGGAATGCAA AATGGTATAG CCACTTTGGA
57151 AGACAGTTTG CAGTTTCTTA CAAAATTAAA CACACTCATC ATATGATCCA
57201 ACAATTGCAG TCCTTGATAT TTACCCAAAG GAGTTGAAAA CTTATATTCA
57251 CACAGAAACC TGCACATAGT TGCTTACAGC AGCTTTATTC ATAATTGCCA
57301 AAACTTTGAA GCAACCAAGA TGTCCTTCAA TAGGTAAATG AATAAATAAA
57351 CTGTAGCATA TCCAGAAATG GAGTACTCAG TGCTAAAAAG GAATGAGGTA
57401 TCAAGCTATG AAAAGACATG GAGGAACCTT TATATTTTTA TTTTTTTAGA
57451 GACAGGGTCT TGCTCTGTCA TCCAGGCTGG AATGCAGTGG CACAATTATG
57501 GCTCACTGTT GCCTTGACCT CCTGGGCTTG AGCTCTCTTC CTGCCTCAGC
57551 CTCCCAAGTA GCTGGGACTA CAGGTGCATG TCACCCACC TGGCTAATTT
57601 TTTTTTTTGA GAGATTGGGT CTTGCTGTGT TGCCCAGGCT GGTTTTGAAC
57651 TCCTGGGCTC AAGTGATCTT CCTGCCTCAG CCTCCCGGAAG TGCTGGGATT
57701 ATAAGTGTGA GCCACTATGC CTGACTTTTT TTTAAATTTA TTTTTCTTCT
57751 AGAGACAAGG CCTTGCTTTT TATTGCCCAG GCTGGAGTGT AGTGATGCAG
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FIGURE 3-17

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57801 TCATAGCTCA CTGTGGCCTC AAGATCCTGG GCTCAAGTAG GAGCCCAGCT
57851 AATTTTTTTT AAAATTTTTG TAGAGATGGA GCCTTGCAAT GTGGCCCATG
57901 CTATGGAGGA AACTTAAATG CATATTTCTA AGTGAAGAAG CCAGTCTGAA
57951 AATGTTATAT ACCATGGGAT TTCAACTATA AGACATTCTG GAAATGGCAA
58001 AACGAAGGCA ACAATAAAAA GATGAATTGT CAGGGAGTTG GTCAGGGGAG
58051 AATGAATAGG TGGAGTACAG AAGATTTTTA GGGCAGTGAA ATGTCTCTGA
58101 TACAGTAATG GTGGACACAC GTTGTATATT TGTCCAAATC CATAGATTCT
58151 ATAATACCAA CAGTGAACCT TAATATAAAC TATGGACTTT GGGGCTGGGC
58201 ATGGTGACTC ATGTCTGTAA TCCCAACACT TTGGGAGGTC AAGATGGGAG
58251 GATCACTTGA GGCCAGGAGT TTGAAACCAG CCTGGTCAGC ATTGTGAGGC
58301 CCTATCTCTA CAAAAATAAG GAAACCATGG ACTTTGGATT ATAATGATGT
58351 TTCAGTGTAG GTTCCTCAGT TATAACAAAT GTACTACTCT GGTGGGGGAT
58401 GTTTATAATA AAGGAGGCAA TGCATGTGTT GGGGCAGGAG GTATACGAGA
58451 AATCTGTTTA CCTTCCTCTA AATTTTACTG TGAATCCAAA ACTGCTCTTA
58501 AAAAAAAAGG TCTTAAAAAA TAAAATTATA TTTGAGGGAA AATATTTGAA
58551 TTATTATTAT TATTTTCTTT TTGAGACGGA GTCTCTCTCT GTCCCCCAGG
58601 CTGGAGTGCA GTGGCACGAT TTCGGCTCAC TGCAAGCTCT GCCTCCCGGG
58651 TTCACGCCAT TCTCCTGCCT CAGCCTCCCT AGTAGCTGGG ACTACAGGCG
58701 CACGCTGCTA TGCCCGGCTA ATTTTTTGTA TTTTTAGTAG AGATGGGGTT
58751 TCACCGTGTT AGCCAGGATG GTCTCGATCT CCTGACCTCG TGATCTGCCC
58801 GCCTCAGCCT CCCAAAGTGC TGGGATTACA GGCATGAGCC ACCGCGCCTG
58851 GCCTATTTGA ATGATTTTTA TCAAAGATGT AAATTAAAAC AAATGTAAAA
58901 ATAAAAAACA AATCACTGTC TGATTCTATT TGTATAAATG TCTAGAAAAT
58951 GCAAACTAAC TTATAATGGC AAACTACTCT ATAGATCAGC AGTTGCCTGG
59001 AGGCAAGAGG GAAGAATTGC AGTGAGGTAT GATAAAACTT TTGGGGTAAT
59051 AAATATATTC ATTATCTTGA TTGCAGTGAT GTTGGCACAG GTACATCCAT
59101 ATGTCAAGAT TTCTTGTTGA ATACTTTATG TAGTTTATTG CATAACAATT
59151 CTATAAAATT AAAAATCATA AAATTTTGTT TGTTTTAAAA ACATTCTTTC
59201 TTTCTTTTTT CCTGAGACGG AGTCTCCCTG TATCACCTAG ACTGGAGTGC
59251 TGATTGCAGC CTTGACCTCC TAGGCTCAAG TGATCCTCCA GCCTCAGCTT
59301 CCTAAGTAGC TGGTACCACA CAGGCGCATG CCACCACACC CATATAATTT
59351 TTAAATTAGT TTTTGTAGAA ATAGGGTCTT GCCATGTTGC CCAGGCTGGT
59401 CTTGAACTCC TGGGCTCAAG CAATCCTCCA TCTTGGCCTC CCAAAGTGCT
59451 GAAATTACAG GTGTGAGCCA CTGCACCTGG CCATCTTAAT TTTTAATATT
59501 TAAAAGAAAA GTAAGGGCCA GACACTGTGG CTCTCACCTG TAATCCCAGC
59551 ATAAGACCAG CCTGGGTAAC ATGGCAAGAC CCCATCTCTA TCAAAAATTG
59601 AAAAATTAAC TGGGCATGGT GGTGGCCTGT GGTCCCAGCT ACTCAGGAGG
59651 CTGTAGCTGG AGGATCACTT GAGCCTAGGA CGTTGAGGCT GCAATAAGCC
59701 ATGTTTGCAT CACTGCACTC CAGCTTAGAT GAGAGAGTGA GACCCTGTCT
59751 CAAAATAAAT AGATAGATAA TATATGTGT AGTTTTAAAA ATATATTATT
59801 AAGATAAAAA GCAAGCCAAG ACAATTAAGT GGGGGAAGAA TAGTTTTTCC
59851 AACAAATGGT GCTGGAACAA CTGCATAGCC ACAGGAAAAA GAATGAAGTT
59901 AGATCCCCTA CCTCACACCA TATAAAAAAA TAACTCAAAA TGGATTAAAG
59951 ACCTAAGTAT AAGCTGAGAC AAGAAGATTA CTTGAGGCTT GGAGTTCAAG
60001 ACCAGCCTGG GCAACATATT GAGACCTCGT CTCTTAAAAA AGAAAAAAAA
60051 TCAGCCGGGC ATGGCAGTGT GTACCTGTAT TCCTAGCTAC TCAGAAGGCT
60101 GAGGCCAGAG GATTGCTTGA GCCCAGGATT TAGAGGCTGC AGTGAGCTAT
60151 GATTGCACCA CTGTACTCCA GCCTGGGTGA CAGAGTGAGA CCTTGTCTGC
60201 TCCACCCCTC CTCCACAAAG TGTAAAGGTA TAAATGTTTG TGGCCTTGGA
60251 TTAGGCAATG GTTTATTAAA TATGACATTA AAAGCACAAA CAACAACAAA
60301 ATAGATTAAT TGGACTTCAT CAAAATTAAA ACCTCTGTGC TTCAAAGGGC
60351 ACACCAAGAA AGTGAAAAGA GAATCCACAC AATGGGAGAT AATTTTTTGC
60401 AAATCATGTA TTTTACAAGA CTGGTGTCCA GAATATATAA AGAACACTTG
60451 CAACTCAGCA ATAAAAAGAC AAGTAACACA ATTTAAAAAT GTTGAAAGGA
60501 TTTGAATAGA CATTTCTTCA AAGAAGACAT ATAAATCACC AATGAGCATA
60551 TGAAAATGTA CTCAACCTCA TTGGTCATTA GAGAAATGCA AATAGAAGTC
60601 ACACCCATTA GGATGGCTAA AATAAAAAAA GATGAACAAT AACAAATGTT
60651 GGCAAGTATG TGGAAAAATT AGAACCCTCA TACACTGTGG ATGGGAATGT
60701 AAAATGGTGC AGACACTTTG GAAAGTTGGC TATTCCTCAG AGATTTACCA
60751 CATGGCACAG CAATTCTACT TTTAGGTGTA TACCCAAGAC AATTAAAAAG
60801 ATATATACAG GCCGGGCGCG GTGGCTCAAG CCTGTAATCC CAGCACTTTG
60851 GCCAAGGTGG GTGGATCACG AGGTCAGGAG ATCGAGACCA TCCTGGCTAA
60901 TACAGTGAAA CCCCATCTCT ACTAAAAATA CAAAAAATTA GCTGGGCGTG
60951 GTGGGGGGGC GCCTGTAGTC CCAGCTACTC GGGAGGCTGA GGCAGGAGAA
61001 TGTCGTGAAC CCGGCAGGCG GGGCTTGCAG TGAGCCGAGA TTGCGCCACT
61051 GCACTCCAGC CTGGGCAACA GAGCGAGACT CCGTCTCAAA AAAAAAAAAG
61101 ATATATACAC AGAAAAACTT GTACATAGAT GTTCATAGTA GTATTCCAAT
61151 AAACATGCCC ATCAGTAGAT GAATGGATAA GCAAAACGTG GTGTATTAAT
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FIGURE 3-18

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61201 AAATGAAATA TTATCCAGCC ACAAAAAGCA ATGAAGTACT GATACATGAT
61251 CCAATATGGA TGGACCTTGA AAACTATACT AAATGAAAGA AACCAGCCAC
61301 AAAAGGCCAC ATAGTACATG ATTACATTTG TATAAAATGT CCAGAATTAG
61351 CAATTCCATA AAGACAGAAA GTAGATTAGT AGTTGCCAAG GGCTGAGGGA
61401 AGGAGGAATG GGAGTGACTG CTAATGGGTA CAGGGTTTCT TTTTGGGGTG
61451 AGAAAAGTGT TCTGGAATTA CATAATGATG ATAGTTGTAC AACTTTGTGA
61501 ATATACTAAG ACACACTGAA TTGTATCTTT TAAAAAGTTA AATTTTATGG
61551 TATGTGAATG ATACCTCATT AAAATAGTTA CATGAGAAAA AAATCAAAGG
61601 CAAAATACAG AGTATAATTC AAGTATTTTA ATTTTTAAAT ATAAAGTATT
61651 TATAGCCAAA TTTGATTTAC TTCTAAAATG TCTTATTAAA TAGTTTAATA
61701 AAAGCAAAAC TGTTCTAGCA TTCAGTGTTT ATTAATTTGC AATACACAAA
61751 CAATATCATG TTTTACTCAT GTTGGGTCCA CCACATATGT ATATATTTAA
61801 GAATAATGTG ATTGGTCAGT ACTGCAAAAT GTTTTCGTGT ACGGTGGCTG
61851 TGAGTACCAT ACTAATTAGT ACACTAAGAA CTATGAATTG GAACAGGAAG
61901 AAAAGCAAGA AAATGAACAT TCAGCACTAT TTGGAAATGA AACCTCACTA
61951 TGCAAGAATT CATTGCATTC ATGCCTTCTC AGGGGGAGTG TTTGATAAAT
62001 TAATATTTCA CTAACCTAAG AGCTTCTGCT GCTCAAATCC TCTACACACA
62051 CTAATGCAGT GTCAGTCTCT GAGTTTGGCA GTGGCACAGC CATAACTTTA
62101 TGGCAGTTAG GTGAAATCCC TTTTTGTTTT GTGGACATAG AACAACAGAT
62151 GTGGAGTTGT ACTTCTCTGG GGCCAGCACA AACGCCATTA AGTCTGTGAG
62201 TCTCATTCTG TCAGTGCTGA GCATCCATGT GTTCTTTGAT TTGCGAGTGT
62251 GTGTTTGTGA TTGGCAGGTT TCTCTTACGT GACTCTGAAG GAGTGTTGCT
62301 GATCACATCA CACCCATCCT TAGGCCTTAT TGATCATCAG TGTACCTTCC
62351 CACTACTATA CTTTAAATAG ATGCCTGTTA TTTAAATTTG ATTTTGAGAT
62401 TAAACAGAAT GGCAGAGACA ATTTTGAGAC ACATCTTTCT TTCATGCTCT
62451 GGTAGGAAGA TCAAGATTTC TAGGACAGTA GAACAGAGTA AAAGATGAGT
62501 GCTGTTGGGA TCCTATCTTT CTCCTAAGCT ATTTTTTCTC TCTCATGTTAT
62551 TCATCATCTA TCTCAATTTT TCCTAATGAA CTCTTCTATA TAAAAGAGGA
62601 TCCAGGTCCC ACATCCACTG TCAAGGAGGA ATGTAAGATT GACTTGCAAC
62651 TCAGCCTGTG TACGCAGTTT ATGGTTTTTC TTGGCAGGTT TAATGTTCTT
62701 TCTTATCTCT TAACTTCTTG CTATTCAATA GTAAGTAACT CCCTGGCAGA
62751 ATTACCTGTG GCTAGAGAAT GCTGTTATCA GAGCATCTTT GTTTAATTGG
62801 TACTTAGAAC AGAAGGTGTC ACCTATTTGA CAGGCCAACA ATTATGAGCA
62851 AGGAGGCATT TGATTCATCA AGATAGAAAT CTGCCTGTTA GGTGGAAACA
62901 TGTCTATGTG GGTTGATATG TTTTTAGAAT ATTAAGGCTT GTTTGTGCAT
62951 GACAACTTTA GGAAGGTGTA CTCCAAATGT CTCCAAAGGT TTGCTGTAGT
63001 TCTTTACAGA AGTTGGGCTG CTCCTGGTGG ACAGTGTGTA ACAGTGAACA
63051 ATGTATGCTC TAGACTGGGT TCCCTTCCTC CACCCTGTGT CTGTGTGGCC
63101 TTGGGCAAGT TGTTTAACCA ACCACTTTTT GCCTCAGTTT CTTTATCGGA
63151 ACAAGGAGAA TAAGAATACT TCAATCAGGC CAGGCGTGGT GACTCACGCC
63201 TGTAATCCCA GCCTTTGGGA GGCCGAGGTG GGTGGATCAC CTGAGGTCAG
63251 GAGTTCCAGA CCAGCCTGGC CAACATGGTG AAAACCCCATC TCTCCTTTAC
63301 TTATGCTGGC CTGATATTGA TCGTCCATGG TAGAATTGAT ACTGCTTGAC
63351 AAAGCAGCCT ATTTCAGTCA GGACCCTTCT TCTCTAGTTT CCTCTGTAGC
63401 TATTACCTTA GCCTTCCATT TCATTCTTCA CACTACAGAT ACTCTCATTG
63451 ATAAAGGAAT GATGTCTTTA TGCTTTCAAG CATTCTGGCA AGTTAGTAAT
63501 TCAACTATGA TTCTAGGTCA GACAAAACCA GTTATGAACA TAAGACTGTT
63551 TTTAATCTCC TCCCTGGTCC CCCAACCACC CACCCCAATC AGGAGAAACT
63601 ATGTTCTGCA TTGGTTTAAG GAACCCGCTT CTTTCTTTGA TACCTGACCT
63651 ACAGATCCAA TCTATTCCCA GGAATTTTGA TAAGAATTCT CAAATCCTCA
63701 GCAAGGCTAT GCCACTGTCA TGACTCTCCT ATTCCTGGTA GTGTCATTCT
63751 CAGTGTAGGC TGTTTGATAG GTAGTTTTGT GAAGTCTTGT TCATCATAAT
63801 GGATCATATG ATTTTTAAAA GCAGGACCTG GGTCATATGC CCAGATTAAT
63851 TTCAACAAAG TTGGTATGTT TTCTTCCTAA AATTAATTTT TTATGATTAT
63901 CAAAGTTTTA TATGCATACA GTATAAAATA TCAGATTTCT ATAAGGCTTA
63951 TAATAAAGAG TAGCATTCCT CTGCCCTATT CCCCTCTCAT ACTGGGCACC
64001 TTACTCCAAA ATCAACTGCT TTCAGCTCTT TTAGCCATTT CTTATGGTTA
64051 TCTTCATATT TCAAAACAGC ATGCTTATAT GGTTGTATTT TGAATTTTCA
64101 AACTTAGATT TTTATCTACA GACTTCCTTA TGGAAGATAA ATATTTAACT
64151 CTTTTTGTGC TACTCCTTTT CTCATCTCTT AATGTAGGCT ATGTTAAAAT
64201 TTTTGGTTAA ATCAATTAAA AGCCAGTATA GTATAGTGGC TTAAGAGTGA
64251 GGGTGCTCAC CTCAAATTCC AGCCTCACCA CCCATTACTT TGTGTGACTT
64301 TGAGCAAGCT TTAAAACGTC AGTGTCTCAG TTTTGTCAAC TGAGTAGATA
64351 CCTCATAGAA TTGCTGTTGA TATTAAGTGA CTTAATCCTA TGGGCTGAAT
64401 TTGTCTCCCA AAGTTCATTT GTTGGAAACT TAATCCCCAG TGCATGTGTT
64451 AAGAAGTGGG ACCTTTCAGA GTTGAATAGG CTATGAGGGC TCTGCCTTCA
64501 TGAATGGATT AATGCCGTTG TTGCAGTAGT GGGTTCCTTA TAAAAGGAAG
64551 TGTTTGACCC CCTTTCCTTG CCTCCTCATG CATGTGATGG CCTTAGCCAT
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FIGURE 3-19

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64601 GTTATAATGC AGTAGTAACG CCCTTACCAG ACACTGGCTC CTTGATCTTG
64651 GACTTCTCAG CCTCCAGAAC TGTAAGAAAT AAAAGTTTTT TCTTTATAAA
64701 TTACCCAGTC TCTGGTATTC TGTTATGGCA GCAAAAAACA GACTGAGACA
64751 CTTAATATAT ATGAAGCATC TAGACTGTCT GGCACATTGT ACATTTTAAA
64801 TCCCAGATAT CGATATCATC AATATCATCA TCATCATCAT CTGTGGCTGT
64851 ATAATACCTC CCTCTGCATT TAAAGGATGA GGGCTGGTGT AGCAGTTATT
64901 AATATAAGTG AGCTAGTTGG CTATAAACCT CTCCTATAGG CTTTGCCCATA
64951 AACTTGTGTC ATGGATAATC AGAGAATTTG GACCTCCTAA TGACAGGCCA
65001 CTGACAAGAA AAGCCCAGAG GGAGCTGATT GAGCATGCTC AGTTCTTTCT
65051 ACCAAAGGCC TCAATCAGAC AGATTCTCTT TCCCAGGAGT AGACACTGAG
65101 GGGGTGGAAA CAGGCTCTGA GTTGACTCCA CTGAGAAGTC CCTGAATGGA
65151 TAGCAGCCAG GGAATTAAGG AGTTTCCCTG TGGCAAGTCT CTACTCGTAC
65201 AATATTAGGA CAGCTGTTTT TTTAATTTGT TCTGTGGGTG CATATTTTTG
65251 ATCTCCACAA CATAACTACT TACTCACTGT GTTGCTTTTT GAAATTTATA
65301 ACATCTAAAT TTGCAAATGT GAGGTATGCT CTCAGGAAAA TTATATATCT
65351 GTTAAAATTC TTTGCTCCTT TTAGGACACT TCCATCCATC TGGTGACCTC
65401 TAGTAGCGTA CATACTCAGC AACAATTAAA GGTAGTTTCT GGCTTGTTTT
65451 TCCCAAACAA TAATTTGTTC AAAATACAGA AATTTGGAAA GTACCCCATG
65501 ATGAGAAACT TTTGAAAGAG AATTTAATGT ACAGTAACTA TTTTTTTCCT
65551 CTGAGGAATA ATTTTGGGAA AAGAAATTTG CTTTATATTC AGGCATATTG
65601 AGTAAGTTGC CTTCATTTTC AAACAAATTC ATCACCTCTC CTTTCCCCAT
65651 TCCCCAAACT TGTTCATTTT CTTCATTCTT AAACTCTGCA TCTGTCTTCC
65701 CCTCACTTTA CCACGTAGCT AAATCTCTTA AGAGCCAACC TATTGCCACT
65751 CCCTTCATCT TTTTTAATCT AATGGATCAT AAGTCCTGTT GATTTCATCA
65801 CTCACATCTC TCAAATCGGT CTCCTTGGAT ATCTTGCTAC TTCTGATTTC
65851 AGACAATTGT CATTTGTCAC TTGCAGCAGC CTTCCAGCTG CCTTCCTCCC
65901 AATCTCCCCT ATGAGCATTC TGTTCTTCAA ACTGTTGCCA AAGAGGAATT
65951 TCTAAAATAC CGTTTGATCA TGTAATTCCA GGTTTTAAAA ACCTAATGTT
66001 GACTCTCTGA CATTTAAAGA ATAAAGTCCG TATTTCTTGG GATGACTGAC
66051 ATGGCTTTGC TGTGATTCTG GCTACATCCT TAGAGAATCA CTTGCAGATA
66101 TTAATTTTGC ATATGCTATT CCCTTTACAT GGAATGTTCC TGCCTCCTCT
66151 TTCCCCCATC CTTTGCCTGA TGAACGCCTA TTCATCCTCC ATGTCACTTT
66201 GGGTGTTACC CTGAGGAAAC AGTGGTTATT TTTTCCCTGC CCATCTGGGC
66251 TGGATACCCC TCCTAAGTTG TCCCACAACA CACAGTACAC ACCTTGGTCG
66301 ATTATCACAC TGTTTGTTGT TCTGCCGTTG TTTGTGTCTC TTGAATATGA
66351 GTTTCTTGAG ATTAGGGACC TGAGATCCCC AGTGCCCAGC AGAGCAGGAC
66401 CTGTTTCCAC CCCCTCAGTA ACTACTCCTG GGGAAGAGAA CCTACAAATA
66451 AATGTGTATT GCATGAATAA AGCTATATAT CCCCTTCCTG TTCATACTTA
66501 TCCATTTAAT TTCTGAACTC TAAATGCTGT ATTTTTCTCC ATTAAATTTG
66551 GTTTTATTGG TTTCAGTTTC CTCTTTATAT GGATTTTGAG TCCTAATTTT
66601 GTCAACCAGC ATATCAACAG TTCTTTCTAG CTTTTGTCCC CCGGTAGAAT
66651 GGCAGCTCCA TGAAGACAGG GATTAGTGTC TGTTTGTTC ACTGCTGTTT
66701 TCTCAGCATC TAGAATAGTG CTGGCACATA TAGATACTCA CAAAGTATTT
66751 GTTGAATGAA TGAAGGTGTT GCATACAAAT TTGATAAATA AAACTTAGGT
66801 TTTCTTTCAA ATATTAATCC TTAGCTCCAT TCTGTTCAAT ATTTTTATTA
66851 GAGATAACCT TTAAAAATCT TCCTTGTCAC ATAAGAGTTA ATTCCATGAA
66901 TCTTACAGAA CAAGGCTATA CTGAGAAATT CAAGGAACAC CTTAATGAAT
66951 CAGGGTTATT TCATTGTGAG AGAGTATAGA AATGGTTGAT AGTATGCTGT
67001 AAGTAATTTT ACTTTACGTG TAAGTACTTT TCTCTGGCTT TCCAGAACAT
67051 GCTGTTGGAG TAAGAGAGGA ATGCCTTATT GTGGACCGAG GGGATAGATT
67101 TGGATACAGC CTTCTTTGAG GAAGGTAGAG AGGTCAACTA TTACATATCC
67151 AGCAGTAACT TCCCTTTCAA AGACTAAGTG TTCTCATTCA ATCATTTGAT
67201 ACTTTTTGTG CATCTACTAC AATTTGAAGA ATAGAAGAGG GAAATGCATG
67251 TGTAAGGCAT GGTGGCAACA TTTAAGAAAC CCAGATTTGG GGATACAAGG
67301 TGTGTGTGTG CACATGCATG TGTGTGCAAT TTAAATGCAC AGGGTAAAGA
67351 ACTTTGAGTC AGTGACAATG AGTGGCAATG GTGGTAATTA AGTGCTGGGG
67401 AAGATCAAGG GAGAGAGAGG GTGCTGAGAG CCAATAGGGT GGAACATGTT
67451 TGAAAGAGCT GGGTTCTGAA GTATTCCTCC ATAGAAGGGC ATTTTAAATA
67501 GCTTTTTTGC GTCCTTATTC TGTTAAGCAT TATTAAATTG TTCTCCCATC
67551 TTTAAAGGT TCCCTAGCTT AGGTGCACTG GCAAGAAATT ATAAAAGCAG
67601 CATGACCAGG CGTGGTGGCT CATGCCTGTA ATCGCAGCAC TTTGGGAGGC
67651 CAAGGCGGGA GGATTTCTTG AGTTCAGGAG TTTGAGACCA GCCTGGGCAA
67701 CATGGTGAAA CCCTGCCTCT ACAAAAAATA CAAAAATTAG CTGGGAGCAG
67751 TGGCACGTGC CTCTAGCCCC AGCTACTCAG GAGGCTAAGG TGGGAGGTTG
67801 GCTTGAGCCT GGGAGGTGGA GGTTGCAGTA AACTGAGATT GTGCCACTAC
67851 ACACAGCCTG GGCAACAGAG CGAGACCCTG TCTCAAAAAA AAAAAATTAA
67901 ATTAAAACAA TAAAGCAGT GTGGTTGCTT ATAAGGAGTG ATGGAGTGGA
67951 CAGAGGAGGT TTTTGGGCTA GTCAGGTAAG GCTGGGGTAT GAATCTAGAA
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<div align="center">

FIGURE 3-20

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68001 GTTTCCATTT AAATAGCAGG GAGCCCTTAG GCAAATCACT TAACTTCTGA
68051 GCTTTGCCTG TTTCACCTGA GGTTGCTTCA AAGATTGAAT GAAACCGTAT
68101 ATATAAAGTG CTCCTAAACA TCATCTGCCA TGTGGCAGGT TCTCAAGAAA
68151 TGTTAGTTTC CCTTTCTCCT TACAAAGATA AGATGCTTGC TTTGAGTATA
68201 TTTTTAGGCT TCCTGATCAT TATTGGTTAT GATTTTAAAT CTTGGTCCAG
68251 CCACCACCCA TATGGTTTCT GCAGTTAACA AAAGAGGCAA AGGTTCACTA
68301 CTGGGGGAAA AGAGGTGTAC AGAAATGGGT GTAGAGAAAG TAGATGTTTG
68351 AAGGGGATCT AATTAGGAAA GTATTTTTCC TGGTGGTCCA GAATTTAAAA
68401 TTATAGAGTC TTATGAGAAA ATGATAATAT TCAGGTTAAG AACAGTTTAT
68451 TATTTCCTCT CTATATTGGA GAATATTTTC ATTATCTTAT ATAAGAACCT
68501 TGTAAAAATT TTTCTTCTTA ACTAGCTTCC CACTATAGGC CATTAATCCT
68551 GTTATTATTT CAAAGATTAA ACAACTATAG TAATAACAGG ATTATATGTG
68601 CATTAATTTA TATTACTTCA TTCCGCAAAG GATTTGAGGT AGTTTTTAGA
68651 AGCATAAAAC ACTGCACAAA TAAAATAGTA GGATAGGAGT AGAAAATAAA
68701 ATTTCAGCAA CCATGAAAAA TATGACATAG TATATGTTGT TAAGACTGGG
68751 GGAATGTAAA CACATCACCA GTCAGGGCCT ATATAGTTGT TACAGTCCCA
68801 TAGCAAATTT GACTCTAAGC TTCTGGCAAA CAACATGAAA AGGGAAGCAT
68851 GATGGATGTG GTTAAATAAG ACACAATTTA CTTGTTACTT TACTCAAGGA
68901 AGCAAGTATT TTTTGCCCCT TTGTTTCTTA TAGGAGATGC TGGGTAATGA
68951 AGTAATGTTG GCATTGGCCT TATAGTGGAG GTAATAATGG ATTTTATCAG
69001 GCAGTTTCTT TAAGCATCTC TTGATGAAAG ATGAGGCTAT GACATCAAGA
69051 GACAATTCTG AGGCCGGGAG CAGTGGCTCA CACCTATAAT CCCAGCACTT
69101 TGGGAAGCTG AGGCGGGCAG ATCACTTGAG GTCAGGAGTT CGAGACCAGC
69151 CTGGCCAACA TGGAAACCTC GTCTCTACTG AAAATACAAA AATCAGAAAC
69201 CCTGTCTTTA CTAAAAATAC AAAAATTAGC TGGGCGTGGT GGCAGTGCCT
69251 GCAATCTCAG CTACTTGGGA GGCTGAGGCA GGAGAATTGC TTGAACCCAG
69301 TAGGTGGAGG TTGCAGTGAA CTGAAATCAC ACCACTGCAC TCCAGCTTGG
69351 GTGACAGAAC AAGACTCCAT CTCAAAAAAA AAAAAAAAAA AAAAAGACAA
69401 TTCTGAAAGT GGTGAGTCGT TCTACCAGGG GCCAGGATGA TCTCATCTGG
69451 GTTATGGATT CTAGGTCTGG CCTCATCTAA GGTGACACAC AGAGGGTACA
69501 CCGCACAATC TTCCTATCTT CTTTAAATAT CACTGCTTTC AACAGGACTT
69551 TTTTTTTTTT TTTTTGAAAC AGGATCTTGC CCTGCCCTGT CACCCAGGTT
69601 GGAGGGCAGT GGCATGATCA TGGCTCACTG CAGCCTTGAC CTCCCAGCTC
69651 AGCCTTCTGA GTAGCTGGGA CAACAGGTGC ATGCCACCGT GACTGGCTAA
69701 TTTTAAAAAG TTGTTTCGTT TTTTTTTTTC TGTAGAGACA GGGTCTCCCT
69751 AGATTGTCCA GGCTGGTCTC AAACTCCTGG CCTCAAGCAG CTCTCCAGTC
69801 TTTGCCTCTC AAAGTGTTGG GATTACAGAC GTGAGCCACC ACGCCTGGCC
69851 CAAAAAACAT AATAATGTGG TTATTCGAAG AAGTGATTTC CTCTCAAAAC
69901 ATAAATTCAT TTCTTCTTTT ACTCTTGTAA CTTTCTGAGG TGAAAAGTAG
69951 GAAGTTCCCA GATTTTTCAT TGCTGTAAAG AAAGATTATA GACAAGCAAG
70001 GAAGGAGTTA GAATAACCTG TGTGATAATG AATTAGAAGA GTTGGAGGTG
70051 TATGTAAGTA TGCTCAGCAT GAATTTATGT TTAGCTTAAT GTAGATACAG
70101 ATGGTTACAT GTGGAAAGTA TTTATAGCTA TGCATAGATA GGTTGGTATA
70151 TGTACATGTA TTTTCTACCT CCTTTGGCTA AGAGGGCGCA GAAGCCATGA
70201 CATCCCTGTT GCAACAAAAA CACCTAGCAC CATTTATCTT GGTTTGTAAT
70251 ACTATTCTCC AGTAAAAACA ACCAGGGCTC CTTGCAGAAA GGGCTGATGA
70301 TAATATATAA GATTAGCCTG GAGCATCTTA TATATCAGAA AGCAAGGGAG
70351 TACTCAAAAA CTAAAAACAA TAAACTGCTC CCCAATAATG GGAGTATGTC
70401 AAAGGGTCAC AGGAGCCATG TGAAAGAGTT TGCAATAGCC AACAAAATGA
70451 AGAAGTATTT GAATTTAAAT CAGAGTATAA AATAAATATC TACGAGTCCA
70501 TAATGATATA AACAAGTGAT TGAATAAATA AATAAATGTG GGAGACTAGA
70551 CAAATCCCCC ATGCAGAAGA ATTCCAAGTA ATTTATGTAG GTAAATACTT
70601 CACTGTCAAA GAGGCAGAGC ATAATTAATT CCCCACTCCT GTAAGTGTGG
70651 GCTGCTTAGT GACTTCCTTC CAGGAGTGCA GTATAAATAG GGAAAAGAAG
70701 ACAACTTCAC AGTGGAGGAA TCTGGCAAAC TCTGTCCCAC CCAGATGATC
70751 AAGGTTTACA TCAAAAGCAC TAAGCCATGT TGATACTGCA CTGTGTTTCC
70801 TTGATATAAT GGGATGAAAT GGCACTTTGT GTAGTCGTGC TTCCAAAAAA
70851 CCTCATAGCC CTAGACTAAT CATGGGAAGA ACACCAGACA AATCCTAATT
70901 GAGGGACATG CTACTTAATT CCTGAAAAGT ACTCCTCAAT GCTGTCAAGG
70951 TCATCTGAAA CAAGAAAAGT CTGGCAAACT GTCACAGTCA AGAGGAGACT
71001 AAGGAGATAT GACGACTAAA TATAATGTGG TATCTTGTAT GGGATCTTGG
71051 AATAGAAAAA GGATATTAGT TAAAACTGAG GAAATCTGAG TAAAATATAG
71101 ATGTTTGTTA CTAATAATGT ATCAATAGTA GTTCATTAAT TGTGACAAAT
71151 GTAACATACT ATCGTAAGAT GTTAATAATA GAGGAAACTG GATGTGAGGT
71201 ATATGGGCAC TCCCTGTACT GTTCACAATT GTTATGTAAA TCTGAAACTA
71251 TTCTAAAATG AAAGTGTATT TTATTTTATT TTATTTTGAG ACGGAGTCTT
71301 GTTCTGTTGC CCAGGCTGTA GTGCAGTGGT GAAATCTCGG CTCACTGCAA
71351 CCTCCACCTC CTGGTCTCAA GCGATTCTCC TGCCTCAGCC TCCTAAGTAG
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FIGURE 3-21

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71401 CTGGGATTAC AGGCACGCGC CACCCACACCC AGCTAATTTT TATATTTTTA
71451 GTAGAGATGG GGTTTCACCA TGTTGGCCAA GCTGGTCTTG AACTCCTGAC
71501 CTCAGGTGAT CCACCTGCCT CGGCCTCCCA AAGTGCTGAG ATTACAGGCG
71551 TGAGCCACCG CGCCCAGACA AAAGTTTATT TTTTAAAAGG TAGGAAAGTT
71601 TCACATTTTG ATCGTACTAT TGAGATAAAA CTTGGTTGTT GTTGTTGTTT
71651 TTGAGATGGA GTCTTGTACT GTCACCTGGA CTGGAGTGCA ATGGCATGAT
71701 CTTGGCTCAC TGCTACCTCC ACTTCCCGGG TTCAAGCGAT TCTCCTGCCT
71751 CAGCCTCCTG AGTAGCTGGG ACTACAGGCA CCTGCCACTA CGCCCAGCTA
71801 ATTTTTTGTA TTTTTAGTAG AGATGGGTTT CATTATGTTG GCCAGACTGG
71851 TCTCTAACTC CTGACCTCGT GATCCGCCTA CCTTGGCCTC CCGAAGTGCT
71901 GGGATTACAG GCATGAGCCA CCGTGCCTGG CCAAACTTGG TGTTTTCATC
71951 TGAGAATGAG GTTTCCAAGA ATTGAAGATA CAAGTTAGCT AAATAGTATC
72001 AGTGAAACCA CAGAGTATAA CTTCAGACCA CTTGTGGTTT TAAGGCAGAT
72051 CTATGCCACA GAGAAGTATT TGAATTTAAA TCAAAGTATA AAATAAATAT
72101 CTATGAGTCC ATAATGATAT AAACAAGTGA TTGAATAAAT ACATAAATGT
72151 GGGAGACTAG ACAAATCTCC CATGCAGAAG AATTCCAAAT AGTTTATGTA
72201 GGTAAATATT TCAGAGTATC AGTACTATGA TCCTTCTTAC AATGCTATAT
72251 CCGACTAAAA AAAAAAAAAA GAAAAAAAGA AAAAGAACTG TGATCCTAGT
72301 TGCGAATGTT GACTTATAGC CAGAAAAGAT GACTTTCTTA TTTGAAAGCA
72351 TCATGAAATG CTATCAGCAT GCAGAAATGA GAGGGCATAA CAGAGAGCTA
72401 TTCTATCGTA TTTTTATTTA ATGTTTTAAA AGAGCTATTA ATAATATAAT
72451 GTGAAGAGAA GTTTTAATTT CAGAGGAATG GGATGTTTGG TTTTAAGATT
72501 ATTTTTTGCAA AATGTAGTCT GTCATTTTTA AAGTGAACTT TATAATGAAA
72551 AGAGTTTGAA ATTATTTCCC TATTATTAAT ATTTATTTAT TTTTATTACT
72601 TTTCTGCCAT GACAATTACA GTGCACATTT TCCCTATTTT TAGCTTTTTT
72651 CTGGTAAAGT GATTTTACCT CCTGTAGATC GTCAGTCCCC AGACTTTCTG
72701 GCACTAGGGA CTGGTTTCAT GGAGGACAAT TTTTTGACAA ATTGGAGGGG
72751 GAATGATTTC AGGATAAAAC TGTTCTATCT CAGATCATCA GGCATTAGAT
72801 TCTTACAAGG AATGTGCAAC CTAGATCCCC TGCATGCACA GTTCACAATA
72851 GGGTTTGTGC TCCTATGAGA ATCTAATGCT GTGCTGATCC GACAGGAGGT
72901 GGAGCTCAGG TGGTAATGCT CGCTCACCTA CCACTCACCT CCTGCTGTGT
72951 GGCCTGGTTC CTAACAGGCT CGGGGGCTGG GGACCCCTGC TGTAAATAAC
73001 CTTTCGAAGA TCTGAAAATT AACTTTAGTA TTTTTTTGTA TTTACTCGAT
73051 ATTTTAAACA AACAAAAATC TAGAGAATGA CATAACAAAT GTATTTTCTG
73101 CGTATCCACT ACTCTTTACT CAGATCCTAA CATTCTCAGT TTTGAAAAGA
73151 TGTAGGCTGG TCACAGTGGC TCATGCCTGT AATGTCAACA CTTTAGGAGG
73201 CCAAGGAGGA CAGATCACGT GAATCCAGGA GTTAGAGACC AGCCTGAGCT
73251 ATAAGGCAAA ACCCTGTCTC TACAAAAATT AGCCAGGTGT GGTGGCCTGC
73301 ACCTGTAGTT CTAGCTACTC GGGAGCCTGA GGTGGGAGGG TCAATTGACC
73351 AGAGGCTATA GTGAGCTGTG ATCCTGCCAC TACACTCCAG TCTAGGTGGC
73401 AAAGCAAGAC CCTGACTCAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAG
73451 ATGTAAACAT TACAGGCCCA GCTGTGGTCC CGTGTACACT TCTCCATTCC
73501 TAATCCCCTT CATGCACACT TTCCCACAGG TAATCACTAT CCCACATTTG
73551 CTTTAATTAT TCCCATCATG TTTTATGCTA TGACTACAAA TGTGTGAATC
73601 TATATTCCAC TGTATGTTAA TACCAACATT TTTTCATTTA TTTTACCGCT
73651 GATGGGCAAT TTAGGTTATT TCCAGATTTT TACTATTACA GATGCTTCTG
73701 TGAACATCCT TACTTCATTTC TCCTTGTGCA CATGTGCAAA ATTTCTCTGG
73751 AGTACATACC TGGGAGTGGA ATTACTAGAA TGTGGTGCAT GTACATGTTG
73801 TTGTATTTAT CAGTAGTTCA CTCTTATTTA TTGCTGTGTA TTCCATTACA
73851 TAGATATACC ATAATTTGTT TATCTAATCA CTTATTTATA GACATTTGGG
73901 TTCTTTCTGT TTTTTTGACT ATTAGAAATA AAGCAGCTAT AAACATTTGT
73951 ATATAAGTTT TTGTATAGGC ATATGCTTTG GTTTCTCTTA GGCTCAGGGG
74001 CTGGGAACCC CCTAGGAATG GAGGAATAGC TGGGTCATAT GGTAGGTTTA
74051 TGTTTAACTT TTTAAGAAAT TCCTGAACTG CTTTCCAAAG TGTTTGTACT
74101 ATTTTATATT CCCAGTAGCA GTATGTGAAA GTTCTTGTTG CTCTACATCC
74151 TCACCAACAC TTGGTATGAT TAGTCATTTT TAGATATCCT GTGATGTGTG
74201 TGGTTTTTCA TTGTTTTAAT TGACAGTTCC CTGATGACTA ATGATATTGG
74251 GTGTCATAGG CATATTTTCC ATTTATATAT CTTTTTTGTA AAGTTCAAAT
74301 TTTTTGCCCA TTTTTAAAAT TGAGTTGCTT GGTTTTTATT GAGTTCTGAG
74351 AATTTTGTAT GTAATTTATA TACAAGTTCT TACTAGATAT GTAATTTGCA
74401 AATCTTCTCT CTCAGTTTGT GGCTTGTCTT TTTATTCTCT TAGCAGTGTC
74451 TTTCAAAGAG AAGTTCTTAG TTTTGATGAA GTTTAGTTTA TCAACATTTT
74501 CTTGTACTGA TTTCTTGTAT GGGCATTTAG GTTTTTCATG TTATATCTAA
74551 GAAATCTTTG CCTAAACCAA GATCACAAAG ATTTTCTCCG GTATTTTCTT
74601 CTTTTGTTTG AGACAGAGTC TCACTCTGTT GCCCAGGCTG GAGTGCAGTA
74651 GTGCAGTCTC AGCTCACTGC AACCTCCACC TCCTGGGTTC AAGCGATTCT
74701 TGTGCTTCAG CCTCCTGAAT AGCTGGTATT ACAGGCATGT GCCACCATGC
74751 TCAGCTAATT TTTGTATTTT TTTAAGTAGA GACAGGGTTT CACCATGTTG
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FIGURE 3-22

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74801 GGAAGGCTGG TCTTCAATTC CTAACCTCAG GTGATCTGCC CAACTCAGCC
74851 TCCCAAAGTG CTGGTGACAC AGGATTTTGC TCAGCTACTT TGCCAACCAG
74901 GGACTCACTC GGCCATGGGC CAAGGCACCC CGCTCACTTG GTCCACCTGT
74951 GCTATAGCTT CTACTGACGT TCAGCGGTTC CCGAGCTCTT GTCATGCATC
75001 TAAAAAGAAG GAGGATATGC TGACAATTTG AAGTGTAAGG ATGGGTGGAG
75051 AAGAATTTTA CTGAGTTATG GAACAACTCT CAGCATTAAG GGGACACGGG
75101 GTGCTCCCTC ACCCCCACAG TCAGGTGGTT TTTCTCTCTC TCTCTCTGTG
75151 TCTGGGTCTG GGGCTTTTTA TGGACTCAGA ATGGGGAGTG TGTACAGATT
75201 GGTTTGTGAG TATGCAATAA AAGTTAAAGT GAAGACAATA TTCAAAGGTG
75251 GGCGCGATAG TGTAGAAAAC CAATTAGGAA AGGGTAGGTA TGTAGCCTGG
75301 CATGGTGGCT CGTGCCTGTA ATCCCAGCAC TTTGGGATGC CAAGGCAGGT
75351 GGATCACCTG AGATCAGGAG TTTGAAACAA GCCTGACCAA CATGGTGAAA
75401 CCCCGTCTCT ACTAAAAATA CAAAAATTAG CAGGGTGTGG TGGCACACAC
75451 CTGTAGTCCC AACTACTTGG TAGACTGAGG CAGAAGAATT GCTGGAACCT
75501 GGGAGGCAGA GGTTGCAGTG AGCCAAGATT GCACCATGGC ACTTCTGCCT
75551 GGCTGACATA GCGAGACAGT GTCTCAAAAA AAAAAAAAAA AAAAAAAAAA
75601 AGAAAGGGTA GGTATGTGTA AAATAGGTGG AGGGTGGGGA TCAATCAGAG
75651 GAAAGCATGC CAAATGGGAA GACAGGTTCT CAATCCAGTC CATGGATTTG
75701 CCTGGGACTT GTAGCTAGGC TTTAAAGTGT CTTCAGCTTG AAGGTCAGGT
75751 TTCACCAGGG ACCCGTTCCT ACACCCCTAT CTGCCTAGGC ATTTGTCTGC
75801 CTCTTGCTGC TATCAGTTCT CCCCTCTGAA GAGGTACATC TAACTGCCAT
75851 TAGAATAGGG ATGATGACTG ATACTAACTG CTTCCTGCTG ACAGGGGTGC
75901 GGGGTGCTGT TTTGGGAAAA TGGCAGTCAG ATCTCCCTCA GAGGCCTATC
75951 TAAGGGTCCC CAGTAAAAGG GAGCCATCGT CTGAGGCTCC AGTTTCATGA
76001 CTGGAGTTTA ATGGCCTGAA AATGAGAAGA CAACCAGATT ATTAGAAGGC
76051 ATGTATCAAA ACAAATAAG GGGGTAAGGA CAGCTCAAAA ATCCTGAGGC
76101 TGCCAACATG CCCAGATAAC AGGTGGCTAT AGTTATGCCT GCTAAGATTT
76151 GGGTGAATGA GGCTCGGCTT TGGTCAGCTT CTTTGGTCTT ATTTTCCCAA
76201 ACAAAGAAAC CTCTGGGTTA CGGGCACCCT GTTTACTCCT ATCACCTGGC
76251 AGGATTTGCA GGATAATTGC CCAGAACTAG AATATTGATC CAGATTTTTA
76301 CATCACCCAT CCCTTTTGTT TCTTCTGAGC TGCAGCTGAT GATCACTGGT
76351 TGGTTCACAG AAATAAGCAG GGTTAGTCTA AAATGCAGAC AAAAACTTAA
76401 AAACAACTAA TGAGACTAGA ATTTAATGAA AAGTGTATGA TAAATTTTGA
76451 AACATAATTT TTCTCTCTCC AGTCCTCATT TTTGTTAAAA ACAAATCATG
76501 ATAGGACTGA GTCATTTGCA GAATAAACTT TAGTCTTATA TTTGGCCTGG
76551 TTATTTGCAT AAAGCACAGC AAGAATAATT ATTTTTCACA CAGGCTTTTA
76601 AAATTGGCTT TGATGGAACT CTGTTCCACA AGGAATTTCA GATAAGACCT
76651 TTTAAAGCTG AGCCCAGCCA TGGGTTTGTA TCCTCAAATA CCTATGAGTT
76701 GGGTAAATTC CTCTCTTCTT GAGGTCCCAA GATAACATGG GGTTCCTGGG
76751 CCTATTAGAA AGTGACATTC TTTATTCACC ACAGATTAGG AACTCTGTAC
76801 AGGGACTGTG TAGAAGACAA AGTATGAGGC CAGTTTTCCC AAGGGGCTTT
76851 TATTGGTTCT GCAAGTCAAA CTTGATTTCT TAAAGGTAAG CACACCCTTC
76901 CAGTCAAAGC CTTGGTAAAA CAACCAGTTT CTCCAGTTGT GTCCTGTTGC
76951 AAAAGAAAAT GGATTCTTAC TGCACTGATG CAAATAACTG TATTGCTGCA
77001 AATTAAGAAT ACTCACAAAT AGTTTCCAAG TTCTGAGGAA ACCAGGCAAA
77051 AAGAAATAAA TGTGCTCCAA ATTTTGTTCA CTGGAGTATA CCTTACTCAA
77101 TTGTTAAAAG CTATAGATAG CTCAACATGA AAGTTTCCTT GACTCTGAAA
77151 AACAAAACAA GGATCAGCAA TGTTTTAAGC AAAAAAAGAT TACTTCAGCT
77201 TTCTATTAGT TCAGTACATT CTATTAACTC TTCTTCTGCT TGATATTCAT
77251 GAACATTTCA GCTCTTCATG AGTCCTGTAC ATTTTCCCTC TATTCCAATG
77301 TCACAATCTC CAAAGTTATC AGAAACCTGC ATTTGAGAGC ACCTGTCAAA
77351 GTCCCATAGC TGATTATAAA CCATCTTTTG AAAAGGATCA AAATAAGACA
77401 ATTGTCTGTG AATGACAAAA TGTCTTTGGG TAATAACAGT CAAAGCCATG
77451 ATTGACAAAG AAATTTGGTT ATTTCTGAGC TTTACAATAA CAACATAATA
77501 ATTTTTTTTT TTTTTTTTTT TTTTGAGACG GAGTCTCGCT CTGTCGCCCA
77551 GGCTGGAGTG CAGTGGCGGG ATCTCGGCTC ACTGCAAGCT CCGCCTCCCG
77601 GGTTCACACC ATTCTCCTGC CTCAGCCTCC CAAGTAGCTG GGACTACAGG
77651 CGCCCGCCAC TACGCCCGGC TAATTTTTTG TATTTTTAGT AGAGACGGGG
77701 TTTCACCGTT TTAGCCGGGA TGGTCTCGAT CTCCTGACCT CGTGATCCGC
77751 CCGCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAG CCACCGCGCC
77801 CGGCAACATA ATAATTTTAA TTACGATTGA TAGCATATAC TCAGACATTA
77851 GAATTTTAGA AACCTCATAG AATTTTTGGAA CATATGTATT TTTCATTAAA
77901 ATATAACCTG AAGAAGATTA AACATTATTT TTATTTTGGC AATCCCACAT
77951 AACTAAACAT GTCAGTTAAT CCTGTTTACC TCTCTTTTGG ATGCTCCAGG
78001 AGCCCTCTGT AGTATTCAAA AGTAAGGGGT CAGAAAAGAC AACCTTGAAA
78051 CTGAAGTTTG ATTTTGGGAA GCCTGTTAAG TACATTGAGG GTTTAAAACA
78101 CTTTATATTA TGAAATACAA TTCCAGATTA CCATAAGTCA TTTATTTAGC
78151 CAAAATGATG ACTCAAAAAT TTTTAAAAAG GTAAAAACCT TTACTCATTA
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FIGURE 3-23

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78201 AGAGTGAAGA CAGCTTTCCA AACAAACAAT CCATCTCTGG TCTCTCCCAC
78251 ACCCTTTATT TTTTGATGAA ATCTTTAGAT AATTCTGTCC AATCTTAACC
78301 AGTTTGACCA TGAGGTGAGA TTCTTATAAA CCTTTACAAA TTTTTGTTAA
78351 AGAGTAGATC AGTGCCTTAA GAAAACCTTG TTCTTTTATT CTAATGTTCA
78401 ATTTACAGAA AAACCATGTA ATACCCTTTT GAATTTAGTC AATATGTTCA
78451 CACACAGAAT TTCTTTTGCA AGATTAATTT TTACAAACCT TCCACAACCT
78501 TCAACTTTAT CTTATCCAAC TTAAAACAAT TATTTAATCC TCTAAACTAG
78551 GCAAAAATTT AAATTCCCAT GCCTTCTTAT AATCCTTTAC TAAAAACACA
78601 TTTACTTTCC TTACACACCT TGATGTAAAT CTGTTTTCAG TAGTCTCAAT
78651 TACATGGTAT AATGGTAAAC CTTAGCAATT TTTAATTTTA ATGTAAAGCC
78701 TGGTAAGTTA TTTTAATTAT GTGCTACCAA TTATACCTTA AGTTGTAGCG
78751 ACTCTGGTGT GCTATTGGTA ATATGGCCTT ACAAAACTGA AAAGCAAGCA
78801 AGGTGAACAA TTTTCAAAAG CCCAAGAAGC AGGCTGGGTG TGGTGGCTCA
78851 CACCTGTAAT CCCAGCACTT TGGGAGACCC AGCCAGGTGG ATCACCTGAG
78901 GTCAGGAGTT CAAGACCAGC CTGGCTAACA TGGTGAAAT CCGTCTCTAC
78951 TAAAAAAAAA ATAAAAAAAT TAGTTGGTCA TTATGGTGTA TGCCTGTAGT
79001 CCCAGCTACT CAGGAGGGTG AGGCAGGAGA ATCACTTGAA CCTGGGAGGC
79051 AGAGGCAACC AAGATCATGC CACTGCACTC CATCCTGGAC AACAGAGTGA
79101 TACTGTTGAA AAAACAAAA AGAGAAAAAA GCCAAAGAAG CAGTTTATAA
79151 CTTTAAAGCA TTTAGTAAAC CTAGTATCTG ACCTGCATAA TTTAGACCAC
79201 ATGTTTACAT TTTGAAGACA TTTGTATTTT ACCAATAATC TCTAAAACTT
79251 TTTATTTTTC AAATATTAAA ATCATTTGAA CTAAAAGGTA TTATAGCTTT
79301 TATTTTTCCT TCAGAAAATA TTTGATCTAA GTGCTTATTT TTCTCTAAGC
79351 CAATTAATTA GAGCTCTTTT TTATACAAAC ATCACACATA TTGCACATAT
79401 ATAACTACAC AGACAGAGGA TCCAGGAGTT GTAAGATTTT TCATTGTCCA
79451 ATCTCCTAAT TAGATTACTG ACCTCAGGAT GGAGCCCTTC AAGAGCAGGG
79501 CTAGGAAAGC ATGCAGTTTC TAGGGCCTAA TAAATAGTTA TAGCTGGAAG
79551 ACAAAAACAG ATTTTGAGAG GGATTTATCT GCTTTTAATT CTTTGGGTTT
79601 CATGAGGAAA ACAGAGGTTT TTTTCTAAAA TGGGGTCAGT GGTGCCTCTT
79651 CCATTTTTTC CAGGGAGTCC CAGGCCATCA GAAGTTATCT TAGGGCCTCT
79701 CATGCGTGCA TTAAGAGAGG CAAGACAAAA TGGAGAAAAG TAATTCAGTT
79751 GACTGAAAAA GAAAATCTTT TTCCAGTGAA ACAAGATGCA AGAAGAGGAA
79801 AACATAGAGG CCTTTTAAAT ATGCCTATAG CTTGGATATC CACTTTTAAT
79851 TAAGCTGACT TTTTACCATA GTGCTCTTAT TTTAAAAAAT CCTTTTAAAT
79901 CCCTTGTTAC CCAACTTTAG CCTCACCAAG TGGCCAATAT TTCTGGCTTT
79951 TGAACTTTAC CAAAAGTAAC CTCACAGGTG AAACCAACAA GCCTTAAGTA
80001 AGGTTGTGAC TTCACTGCCT GTGTACAAGG TATTTTCAAA GAGATGGTAA
80051 GCAGTTTTTA CAAAATCTAG AATCTTTAAA GATAGCTCAG AGAAAGGAAG
80101 ATTTAAGAAA GGAAGCTAGA AGTTGTTCAT GGAGGGGAAG AGAATCAGCA
80151 AATGATAAAA GTCACACAGA TATTAGCCAG AAAGTACTCA TTCCCTAAGC
80201 CAGGATTGAA CCTGGGCTTC CATTGTAAAA TGGCAGAGAC CAAAAGAAAG
80251 TCCTTCCACG TGGTTACAAG GTCAAGCTCC CAAGGACATA AAACAAGATG
80301 GAGACCTTAT TCAGTTTTTT TTCCTTCAGA GACCTGTAGC AAAGTCTGTA
80351 ACTGACCAGT TTGCATGGCT GGCTTGAACA GTGGGCTTAT GGGGTCCTAG
80401 GTCTGTGTTC TATCCTGTCT TACTCCTTAT GACAGAACTG TACAGAAAGA
80451 CACACAAAGC ATAGCAGATT GGCTACAGCT TAAGATTAGC CTCACAAATC
80501 CTTTTTTCCA TTAATCAAAA CTTTACAGAA GAATAAACAG TGATTTTTAT
80551 CCTTCCTTTT ACTGGTTTGC ACAGGGAGAA AGAGGCCAGA AGTCTGACTG
80601 GTAAGAACTT TTACTCTTTT ACTGGCATGT CAGGCTTCTG GGTTCCCTTC
80651 CCAGTTCAAT TTTAAGCCAA GCAGTTTAAG GTTTGGGGAT ACTAAACTTT
80701 TCACAGATAT TTTCCAGTAT GTTTAAATAG TTTTGTTTAG CCCAGATTTA
80751 ATAATAGTTA TCTGTAGTAG GGTTTGCATG ACCACTTTAT TCCAATGCCA
80801 CAAACAGAAG TTGATTAGCA AATTATATAT ATATTTGCAT ACGTTTATTT
80851 TACATAATTT AAGGCTATTA GACCAATATT GGTTATTACA GAGCATAGAT
80901 ACCTTGAAAG AGGCCAAGAT GGAGTGGAAA TGCAGGTTGG AGCTACCAAA
80951 GGGCAAAAAA CTATTCATCA ACCTTTAACT ACAATAAATC TTCCCTTTGG
81001 GTATTTTCAT TTGTAAACAC TTTGCCCTTG CAGTCATTTA CATCGGCATA
81051 ATTACAACAC CTTTGCTTTA TTTGGCATGC AGGAGAATCT TCTTAAAATAT
81101 TAAACCTAAC CACTTTGAGT GATTTGCATC CTGCTTTTGT CATACATTTA
81151 GAGCCTTGGG ATTTTTTCTC AGAATGGAGT AGGAAACAAA TAGGGTCTGG
81201 ATAGGGAAAT TGAAAAGCTT CCTGGTATTT TTCTGTTGAA AGATTTCTTA
81251 ACATGGCTTC TTGGATGTGT CTCTCTGATG TCAAACATAC ACACATATTC
81301 AAATAAGAGT TATACAAGCA CATCTTGCAC ATTTTTGGCA TCTATGTCTC
81351 AAGACACAGG ACATTCTATC TGGTGTTCTG ATCGAACCAC TTTTGCATGT
81401 TACTAGACTG AAAATTATTG GAAGGTAGAG AAATCTCTTA TTTGTTTTTA
81451 TATTCCCAAC AGCCTAGGAT AGAGCCTAGA ACATTAAAGA ACACTAAAAT
81501 TTTAATAGTG TAACTGAAAA GCAGGTTAGT TGGTCACTGC ATGTAGAGTC
81551 CAATTAACAA GAGCAAGTTC TGATACAAAG AAGTGTATTT ATTTCAAAAC
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<p style="text-align:center">FIGURE 3-24</p>

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81601 TAGCTTAGGG GAAGAGGCAC AAAGCATCCT GCCTTTAAAT GTGCCACTTC
81651 ACCTTTGGAG CAAAAAGTGG GCATTTTTAT AAGGTAGGGG AGGAAATGAG
81701 CAAGGGCAAG TGTCCCTCTG CTACTGGGCA AGTATCTGAG CTGGCACCTT
81751 CTTGGGCAGA AGTAAGTTGT AAAAGTGGCC AAGTGGGTAT GCTTTCAACA
81801 TGCCCTCCTA GTGGGCATGA GTTCTGAGAT GACCCTGTGG AGAGTTCTGT
81851 GGGGGCATGC TTTGGTCTGC AAATAGACTG TTAACTTTCG AGGAGAGATC
81901 CTTGGGGGGA AAATATATAT TAGGAAGTCC TCTGTGGGTG TTTTGTAGAA
81951 GGACCTAGAG GGACTAGGGC TCGATTGTTA TTTATTTATT TATTTATTTA
82001 TTGTGTGTGT GTGTATGTGA GAGAGAGAGA GAGAAAGAGA GAGAGACGAG
82051 GTCTTGCTCC GTTGCCCAGG CGGGAGTGCA GTGGCATGAT CATAGCTTAC
82101 TGCAGCCTCA AACTCCTGGG CTCCAGGGAG CCTCCTGCCT CAGCCTGCCA
82151 AGAAGCTGGG GGTACTGTTG TGTGCTACCA TGCCCAGCTA GTTTTTAAAG
82201 TATTTTTTTT TGTACAGATG GGGTCTTGCT TTGTTGCCCA GGCTGGGCTT
82251 GAACTACTGG CTTCAAGTAA TCCTCCTACC TCAGCCTCCC AAAGTGCTGG
82301 GATTATACAT ATGAGCCACT GTTCCTGGTC TAGTTTGCAC TTTTTTTTTT
82351 TTTGAAACAG AGTCTTACTC TCTTGCCCAG GCTGGAATGC AGTGGCACAG
82401 TCTCAGCTCA CTGGAAACTC CACCTCCCAG ATTCAAGCCA TTCTCATTAC
82451 TCAGCCTCCC GAATAGCTGG GATTACAGGC ACCCGGCCACC ACACCCAGCT
82501 AATTTTTGTA TTTTTAGTAG AGATGGGGTT TCGCCCTGTT GGCCAGGCTG
82551 GTCTCGAACT CCTGACCTCA GGTGATCCAC CCACCTCGGG CTCCCAAGGT
82601 GCTGGGATTA CAGGTGTGAG CCAACACGCC TGGCCGTTTG CATTTTTAAG
82651 ATAAAAATTT TACCATGCTG GATATATTGT AGTAGCTATG TACTTCAGTT
82701 TCTCAATTGT TAAACGAACT TAATAGAAGT ACTACCTTAT AGAATTTTGG
82751 GGATTAAATG AAATAGTCTT CTGAGCACAA CAAATATATT ATCAGCACAA
82801 CAGCTAGCTC TATTGAGTCT TTATTATTAT AATAGCAGTA ATAGTCAGAC
82851 TTGGAAGGGG TGAAAGAGAA CAACAGTCCA TTTTATTTTT GTGGCATATA
82901 TATCATAGGT CGTAAGACCT TGGATTGTTT AGATGCCATG TTAAAACTTG
82951 ACAAAACTAG AAATGTTGTG AGTGTGCAAT AGCAGGTGAT AACTAATCCA
83001 ATCATTAATT TATTCTTGAA TTTGATCAGA AGACAGACCT AACTTCATCT
83051 ATTGCCAATT ACTATTGTAA CAAAATCTAT TGGAATTTCA GTTTAGGCAC
83101 TGCAGTACAA CAGTGTGAAT TTCAAAAGTG AGATATTTTA TGTGGCTTTT
83151 TAAAGTAGGT TTTCAAACCA GTTAAAGGCT CTAAAACCCA TTAAGAAGGA
83201 TACTATGGGT CAGGAATAGC ATTTTATGAG GACTCTTGAG AAAACGGTGC
83251 TGTGTCCCCT CCACCATGGT ACAAGTGGAG GTTACTCTCA CTTGTTCTCT
83301 TACTTGGTAT CTCTCCTTGT TCTCTCACTT GGTATCGAGT GAGAGGGGCT
83351 TGAGAGGGAC GACTTAAGAG ATTTAAAGGA TTCCCCCCAG TTGTGTGGGAA
83401 CAGAGGACCA GGGTCTGACT CTCCGGAACA CCCAACAAGG AGAGAACTGT
83451 GGCTGGCTTA CTGTTCCCAC AGAAAGAGCT ATACTGTAAT GGTGTCTGTG
83501 TTGAATTTGC CTACACTCCA GCCTTTGTCA GGGCAAAGGA AATGTATTTC
83551 CTGCAGATTA GAGGTGGGCC TAGCGGAGGA GAAGGGTAGC CTGGAGTTTG
83601 ACTCCTGTCC AAATAGATGC CTGAAAGGGC AGTGAGGTTC CAACGGTGAG
83651 TCTTTTGAAT GACAGCCAAA AAGCCAGGAG AAGAATGAAT TATCCAAGTC
83701 AATGGTGCTA TGGCCAGAAG GAACTCTGAG GTGAGACTCT GAATAACCCA
83751 TGAAAGTGCA TCTGAGAAAA AAGAATTAGC TTCAAACATC AGCAGACAGG
83801 TGTTTTGGCA GGAGGGCTCA TGTTGGAATC TCCTTGCCTT CCTTCCCCAG
83851 CCTCCATCTC CCATGCCTAC CTTGGAAAGA TCGGCAACGT AGGGTTGGTG
83901 TAAAGTCGTG GAAGAGAAGA AAAGCAGCTG ATTTCAATCC CTTCCCAGGT
83951 TCCCTGGGGC TGGGGAAAAG ATTTGATTAC CTAGTGAATA TTGGTTTGTT
84001 ACCTAAAGTG ACCATAAGCC TTTCTTTAAC ATTGACCAAA AGAATCAAAT
84051 GGGCCTGTTG AAGTGTTCAT CTAGTGTCAA GGGAAAATTT TTCCCCACTG
84101 AATAAATTTT AAGAAGGCAG TCAAGACAAG AAGCTATATT TGATTATATC
84151 CTGTTAGTGC TTATTCAATA GACACATAAA TCTGTAATTT TTAATATTTG
84201 GTATAGAAGT AGGTTGAAAT CCACAGTAAT TCACAGAAAC TTGTGCAAGG
84251 GTTTTGTTTT CTTTTCTTTT CTTTCTTTTT TTTTTTTTTT TTTGAGACAG
84301 AATCTCACTC TGTCCCCCAG GTTGGAGTAC AGTAGGATGA CCTCGGCCTCA
84351 CTGCAGCCTC CACCTGCCAA GGTTCAAGCA ATTCTTGTGC CTCAGCCTCC
84401 TGAGTAGCTG GGATTACAGG CATGAGCCAA CACGGGCGGC TAATTTTTGT
84451 ATTTTTAGTA GAGACGAGGT GTCTCCATGT TGGCCAGGCT GGTCTTGATC
84501 CTGACCTCAG GTGATCTGCC TGCCTTGATC TCCCAAAGTG CTGGGATTAC
84551 AGGTGTGAGC CACCATGCCC GGCCAAGGTC TTTTTTCTTG AAAATATCTT
84601 CACTCATATA AGCAGTATAT GCAATATAAG GATATGCTCT TGGGTTTCTT
84651 GATGTGGTCT AATATTTAGT GTTGGCCCCT TAATTATAAA AGTTGCTTTT
84701 ATCTAAAAGT AGATGTTAGT TGTCAGGCAA TGTTTGCTGT AAAAAATAAA
84751 TAAAAAATAA AAGTAGATGT TAGGATATTT TCTTCTAGCT TGCCTAGTAT
84801 TTATATTAGA TTCTTTCTTT TTTTGAGAAA GCGTCTCGCT CAGCTGCCCA
84851 GGCTGGAGTG CGCAGTGGCG CGATCTCGGC TCACTGCCAAC CACCATCTCC
84901 CGGGTTCAAG TGATTCTCCC ATCTCAGCCT CCTGAGTAGC TGGGATTACA
84951 GGCACCCACC ACCACGCCTG GCTAATTTTT GTATTTTAGT AGAGGCGGAG
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FIGURE 3-25

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85001 TTTCACCATG TTGGCCAGGC TGGTCTGGAA CTCCTGACCT CAGGTGATCA
85051 GCCCACCTCG GCCTCCCAAA GTGCTAGGAT TACAGATGTG AGCCACCGCA
85101 CCCAGCCTAG ATTGTTTCTT AAACCATAGA TGTCTGAACT TTTTTGAATG
85151 AAATTAAATG ATTAGAGATT AGTAAAATTT TTGTATAAGA TAGTAGACTA
85201 ACAAATTCTT ACTAGTCTGG GTGTGGTGAC TCATGCCTGT AATGCCAGCA
85251 ATTTGGGAGG CCAGGGTGGG CCGACCACTT AAGCCCAGGA GTTTGAGACC
85301 AGCCTGGGCA ACATGGCGAA ACCTTGTCTC TACAAAAGAT ACAAAAATTA
85351 GCTGGTGTGG TGGCACACAC CTGTAGTCCC AGCTACTCAG GAGGCTTAGG
85401 TGGGAGGATG GCTTGAGCCT AGAAGGCAGA GGTTGCAGTG AGCAAACATT
85451 GCGTCACCGC ACTCCAGCCT GGGTGACACA GCGAGACCCT GTCTCATTAA
85501 AAAAAGAAAA TTTAACCTGT CTCAAGCTCT CCATACTGTA AGGCTCTGCA
85551 TGTCTTGATT GGATTGTGCT AATATATTTG GCCAATCAGC TCCTTCCTAC
85601 TGTCTACTTT TGAATCCCTG TCACCACCAT CTAAGTCAAG ATGACAGTGT
85651 TTACACAGTC TCTTCATTGT GTTTTAAGAT TATAGTCTTC TTTCTGGTGA
85701 GGGAAGAAAG AAAATAGAAA TATGGCTTAC TGATTGGGCC ATGGCTTACG
85751 CCTGCAATCC CAGCATTTTA GAGGCCAAGG TGGGAGGATT GCTGGAAGCC
85801 AGGAGTTCAA GACCAGCTTG AGTAGCAAAG TGAGACCCTG TCTGTACAAA
85851 AGAAACACAC ACAAAAGAAA TATGACTGAC TAAAATACAT ATAATTTTCA
85901 TAATACTTTA AAATGTAAGA AGGCAAAAAA TTTCTGGGCT CAAGGTGGGT
85951 GATCGCTTGA ACCTAGGAGT TCAAGACCAG CCTGGGCAAC CTGGCAAAAC
86001 CTTGTTTCTA CAAAAAGTAC AAAAATTAGC CAGGCATGGT GGTGCACACC
86051 TGTGGTTCTA GCTACTTGGA AGATTGAGGT GGGAAATTTG CTTGAGCCTG
86101 GGCTGTCGAG ATCACAGTGA GCTGAGATTG CACCACTGCA CTCCAGCCTG
86151 GGCAGCGGAG TGAGACCTTT TCTCAAAAAA AAAAAAAAAA AAAGGCAAAA
86201 AATTAAATTA TTAGTATGGT AAAGTTTCGT TTGGACTTAA TATGAAACTC
86251 ATTTCTAGAA ATGATGATCA TTTGCATAGG GCTTAACTTC CTTTGCTAAG
86301 AAAATAGAGT AGTATACTAG GAGACTTCCA GAGCTGCATA GAGCTTCAGG
86351 GTCATCTACC AAGACAGACA ATTTGTTGTC ATCATCAGTG TTAAACTCTA
86401 AATTATTAAG TGCTTATGTG CCAGATACTG AAGTTTATAT ACACTTTCTC
86451 TAATCTTTAA TAATTCTAGA AAGGTATGTG TTTGATCCAT TTTCAAGATA
86501 AGAAAACTCA TTCAGAGGGG AAGTAACCTG ACCAAGAATA CGTTGTAGTT
86551 GTAGAGCTGG GAATATGACT CATGTCTGTT TTTTCCATAG CCCATTTTCA
86601 CTTAGGTTCC ATTAGTTTAT TATATATTTT AGAAGGACTT ACAGACTTGA
86651 TTTCCTCAGC GAAGTCAGAT TACTCATTTC TTTGGCACAG AATTATGATT
86701 ATTTGTATTT AATATTTCTT TCCTGTTGGT TTTCATTTTT GAGTTTTTAT
86751 GGAATCTGAC TTCTGATTCT CAATTTTTTT ATTGTGAAAT ATAACATACC
86801 TTCAGAAAAA AAGATTAAAC ATATCTATGG TTTTATAAAT GATTATAAAA
86851 TAAATACCCA GTAACTATTA TCCAGGTCAG CAAATATTCT ACTAGTTGTAT
86901 GAGTCAATTT CCATGGCAAA AGAACTAAGC TTAGGCACTA TACTCAAAAA
86951 AACTAAAAAT AAAATTTTTC TAAATGTGTA TTATATCAAT GGAATAAATA
87001 CAAATATAAC TTACCATGTC ATAATTCCCC CCACGCTTTC CCTTCTTTTA
87051 CAGCATGGGT AGGTTCTCTC TCCATGGGGA TGATTTTCTT TTGCTGCCCA
87101 ATAGTCAGCG TCTTCACAGA CCTATTTGGT TGTCGGAAAA CAGCTGTCGT
87151 GGGTGCTGCT GTTGGATTTG TTGGGCTCAT GTCCAGTTCT TTTGTAAGGT
87201 AAGGACTTGG TTTTTTCATG TTGCTTTTTA AAAACTGTTA GATACCTTAA
87251 AGTTTTACTT TCAGAAACTA TGCTATTTAC AAGCAAAGAT CCTCCTTTTC
87301 ATTTTTTAAA ACTTTAAGCA ATATGACTTA TAAAACAAAC TGTTATCCAT
87351 AGCAGCAAAT CAGAGCTTGA GAATTTGAAT GCTTTTTTTT CTTGTAATGC
87401 CTAAGACTTA GACATCAATC AGGATATATG TGTTTCTTGG TGCATGGAAA
87451 AATGTTTCTC CTTATCTTTT TCTTCTATTC ACATAAAAAT CCTAATGGCA
87501 CTCAAGTTAT AACAATGATT TATCTAAAAC AGCAGCCTTA GTTTAGGGTC
87551 AGTTCAGTCT GAGGCCCACG GGTTACAATA AGTGGTGTTT TAAAGTAGCT
87601 GTTCATAGGC TTGATATGAA ATATTTTTGT TAATGAGACC AAAACTTTGC
87651 CATTTATTCC AACCCAGGTA GAGAATTCCT GTCTGTTCTT TAAAAAAAGA
87701 ACATGCTAAA ATTTTAAAAT ATCATGGCAA AATGAAGTGG TCCAATGTAC
87751 CTTAAAATAA AACTTAATGT CAATGTACTT CTCCTGTATC TATTAGAATA
87801 AGGATCCCCA ACCCCTGTGC CACAGACTGG TACGGGTCCA TGGCCTGTTA
87851 GGAATTGGGC TGCACAGCAG GAGGTGAGCT GTGGGTGAGT AAGCAAAGCT
87901 TCCTCTATAT TTATAGCTGC TCCCCATTAC TTGCATTACC ACCTGAGCTC
87951 CACCTCCTGT CAGATCAGTG GCAGCATTAG ATTCTTCTAG GAGTGCAAAC
88001 CCTATTGTGA ACTGTACATA TGAGGGATCT AGGTTGCACT CCCCTTATGA
88051 GAATCTAAAT GCCTGATGAT CTGTCACTTT CTCCCGTCAC ACCCAGATGT
88101 GACTGTCTAG TTTCAGGAAA ACAAGCCCAG GATTCCCACT GATTCTACAT
88151 TATGATGAGT TGTATAATTA TTTCATTATA TATTACAATG TAATAATAAT
88201 AGAAATAAAG TGCACAATAA ATGTAATGCA CTTGAATCAT CCCTAACCGC
88251 CCTCCCCCGG CACCATCCAT GGAAAAATTC TTCCTGAAAC TGGTCTCTGG
88301 TGCCAAAAAG ATTGGGGATT CCTGTATTAG AAGAAAAGAC ACAGTGCACT
88351 GAAGAGGGAC TCACTGTAAG GAACGGATGG GCACATAACT GCATGGAACA
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FIGURE 3-26

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88401 TCTCTCCCTG CAGCTCTAGT TCTCCTTGTA AGTCCCTTGC GTTGGTAGAA
88451 TAATCCTCAG TTAGACAAAC ACTGATTTAA TATGTAGCTC TGGCTAACAG
88501 GAGGTGATTA AGAAGAAAAC CTCTTAAGAT GATTTCCATC CTTTGTCTCT
88551 ACTTTAGTGG TTTATCTTCA TTTCCTGCCT CTTTCCTGTC CCTAGCTGTC
88601 TTTATGCTGC TTTAGTTGAA AAGCGTTAAT GTGGTCATTA AGGAAAAATA
88651 AGTCAAATTT ACATTTGACT TTTTATTTTT AAATATTTAA TCAACAGAAT
88701 CCTTGGTTTT ACTCATTGCC GCCCCCCACC CCCCAACACA CATCCCTTCC
88751 TCAACTCTAA AGTGAGCCTC ATTCTTTCAT ATTTTCTTCC ATCTAATTTA
88801 GAAATTCTAT TTGGATTTTT AAAAATTATA TTTATTTCTT TGTAGAAAAT
88851 AGATATTTTC ATCTTTAAAG TACCTTTATG GGTTTTTTCT TCTAAAATTG
88901 TTTTTTAAAG AAAAAAGTTT TATTTGGAAT AAGATTCTTG TAGGTAATTC
88951 CATGAGATGA TTTATTTTAG CAGCAACATA ATATTTACAT TATTATTAAT
89001 GTAATTAATG TTATTAATAC CTCATCAGAT AGCTTCTTTG ATCTGGAAGC
89051 TTCCAGGTAC CTATTGTCAG TACTTGTGGC TCTACCACTT GCCGAATGTA
89101 TTACAACTCT AGTTGTGGTA GAGAGGGGAC TGAGAGGTAG ACAACTTATG
89151 TAATCTACTA CCTAGTTTGT TAACAAAACA CACATACAAA GCAATGTTTT
89201 TCAAATTTTT CTGACCACTG AGCAATAAAA ATTATGACAT ATATTTTGAT
89251 GTGACCCAGT TCTGTCTCTC TTTCTCTACC TCCTAAGTGA AACAAAATTT
89301 ATTGAAACCA AAATTCCCTT ACTACATGTA ATATTCTCAT ATATTCTATT
89351 AAATTTCGTT ATTTAGCTTG CTGATCAAAG GCTACTGAAA CTTGAGAGCA
89401 AGATACAGGA GCAAGGGGAA ATGTGGTATA GATTCTGAGT GTCAAGTGGC
89451 AGGTCCATTT TTTCCTCTAG CTCCAGTTCT GCCTTCTGAG GAAAACCTTC
89501 TCCAACAACT TAGGTCAATC ACACCCATGT CCCTTCTCTG AATCCTTTTT
89551 GCACATATGA TTGGTATCCG ACAGCCTTAC TCATTTACAT TGCACTTATT
89601 TGGCTGCCAA ACGTCACAAA CTGGAACCAT GTGTTACTGA AGGGAAAACC
89651 TGGAAGTGAA AAGGGTTCAG CAGTAGTGCA AATACCATCA TAAAGCTCAT
89701 ATACTTCACT CTGCAGGAGG GAGAAGCTCT GTGGTTTTCC AACTGAGAGC
89751 ATTACAGTAC AGTGATACCA CTGTACAGGA ACTGATGTTC CTGATGATTC
89801 TGCTGTGAAC AGTATTTTTA ATATACACTT TGAAGAAGGC AGAGAGAAAT
89851 GTATAATAGA CTTAAATTTT TTTCTTTAAA ATTGTTAAAT AAAAACAAAT
89901 AAGCACTTTA AGTAAGTTAC AATTATCTGG AAAACTACTT AGGTGGAAAA
89951 ACTGATACAG AATGAATGAA GTATTAATTT CTGTTTTGTT CTGTGTTATT
90001 ATTATTTGGG ATAGATGTCT TGTTTCTTTA AGCAGACTAT GAATATCTTG
90051 AAGGCAGAAC CACATTTTTT TTTTTTTTGA GACAGGGTCT CACTATTACT
90101 CAGGCCAGAA TGCAGTGGTG TTATCATAGC TGACTGCAGC CTGGATTCCT
90151 GGGTTCAAGC CGTCCTCCTG CCCCAGCTTC CTGAGTAGCT AGGACTACAG
90201 GCATGTGCCA TCACACCCAG CTAATTTCAG CTATTTTTTT TTTTTTTAAA
90251 TAGAGATGGG GTTTTGCTAT GTTGCCAGAC TGGTCTCAAG CCATCCTCCT
90301 GCCTTGGCCA CCCAAAGTGT TGGGATTACA GGTGTGAGCC ACCACGTCTG
90351 GCCAAGGACC AGATTTTTAA TATTCTTTTC CACAATGTAT CTGGTACACA
90401 GTAGTTGCTT AATATGTTGG CTAAACAAAG AGTGGAGATT CAGTAAAGGG
90451 TGATCAGAGT GAGGTGAGAT TAATTTGGGA AAGCCTAGAA GTGATTCTTG
90501 AGCCTGATTT GAAGGTGGTG CTAGCTGTGG ATTAATAGAG GGAGAAGGGC
90551 ATCTCAGAGA GAGGATTGCC AACATGCCTT AATTTTATCA GATTCTAGAG
90601 TTCCTTATGA TTACCTCAGC ATGTTGCTAG ACTAGCATTA TTATCCAAAA
90651 TTTTAATTAT TAACCAACTT TAATCTTACT TTCTAACAAA TTGTTTGCTT
90701 TTACTACTGA TAGCCTTTTC AAAAAACTTT AACTAGTTTT ATTCCTTACC
90751 ATAATTGTTT CAAAGAACAT AATGATATGA TCCTTTATCT TCCTAAGAAA
90801 TGTGCAATTA TTTGGTTAAA CTGTAAGATT ATTTAATCCA TTATTCTTTT
90851 GACACACATGCA TGGCCTTACA GCTTACAAAC TGGGATCACT AAAAGGAATAC
90901 ACTTAATTTA AGTCTTTCTG TAGTCAGAAT ATGATTTCTT GTTGTCTTGC
90951 ACAATACTGA GAACAGTGCA GTACAGGGCG AAGGTTGGTC TACAGCCCTT
91001 AGGCCAGCAA AAACAGGCAC AACTGCACCT CTGTGCAAAT GTTCCTGACA
91051 TAACCTTGGG GAAAAAATAT AAAATGCGGC CTTTTCTTTT ACTACCTTGT
91101 TTGGTAAGTA CCTGGAAAAA CTCCATGAAA TAATTAGATT TCATAGTTAA
91151 TTCTAACTTT TTTAAAAAAT GTTTCATTGA GACTAGGTTT TTGGTTTGTT
91201 AATTGAATCA CTGTTTGATTT TACCCCTTCCT GGCACCAACC TTTATTTCTG
91251 AGCTGTGGAG AGCACAGTTC TCACTCAGTG CTGTGTGCGT CACCTGAAAT
91301 CCACAGAAAG AGGTGGCTGA ACAAAATCAC TGATGACCTT AATGGTTATT
91351 TTTCACATAT TCAGATTAAA TTAAAATACG TTAGTGCTA CATGCTTGAC
91401 TTACTGAGTT TTTCCCTCTA TTTTGGTTAA TTTTTTTTTT TTTGGTTAA
91451 CTTTTACTTG TAGAAAATAT GTTGATGAAC AAAAACCCAC TTATACTATA
91501 AGATTTTATT CTACCAAGCA CACAGTAACA ATATTGAAAG CTGCTTTCCA
91551 TCTTTTTCAT CTTTATACAG TTCCATCGAG CCTCTGTACC TTAACCTATGG
91601 AATCATATTT GCCTGCGGCT GCTCCTTTGC ATACCGCCT TCATTGGTCA
91651 TTTTGGGACA CTATTTCAAG AAGCGCCTTG GACTGGTGAA TGGCATTGTC
91701 ACTGCTGGCA GCAGTGTCTT CACAATCCTG CTGCCTTTGC TCTTAAGGGT
91751 TCTGATTGAC AGCGTGGGCC TCTTTTACAC ATTGAGGGTG CTCTGCATCT
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FIGURE 3-27

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91801 TCATGTTTGT TCTCTTTCTG GCTGGCTTTA CTTACCGACC TCTTGCTACC
91851 AGTACCAAAG ATAAAGAGAG TGGAGGTAGC GGATCCTCCC TCTTTTCCAG
91901 GAAAAAGTTC AGTCCTCCAA AAAAAATTTT CAATTTTGCC ATCTTCAAGG
91951 TGACAGCTTA TGCAGTGTGG GCAGTTGGAA TACCACTTGC ACTTTTTGGA
92001 TACTTTGTGC CTTATGTTCA CTTGGTGAGT ATGCTCCTTC ACTGATCATG
92051 AATATTACTA TTTAATAAAG AAAAACTTCT TTGAAGAGAA AGTTAGGTCG
92101 AGTTAAAGTT GGCCTCAAAC ATTATCCTGG TTGTAATTTT GGTATTCTTG
92151 AAATGAAAGG TCTCTCAAGA CAATGTCAGC ACATCCATTA GACCACTAAA
92201 CAGAGAGAGT ATGTTTCATA GTGTGCTTTG GTATTTTAAA AACCCTGCAA
92251 ACCCAGCCAG ACACCATGGT GCCTGTCTAT GGTCCCAGCT ACTAAGCTGA
92301 GGCAGGAGGA TCACTTGAGC CCAGGAGTTC GAATCCAGCC TAGACAACAT
92351 AGAGAGACTC TACCTCTAAA AATAAAATAA ATGTCCCCAA ACAAACACAA
92401 TGTTTTTTAA CAGGAAGGCT AAAATAGTGG AACAAATTAC AATCAGTATA
92451 AAACATTTGA TAGGTCTCTT TTTCTTCATA TGGCTTTTAT CAGGGACAAA
92501 GCTAGCGCTA TGATTTTGCT ACCATAAGTA AATTGTTTTT CAACCGAAGG
92551 GTGTAGGTAA TTAGCAAAAA AGCCATGATG TTGATACAAA GAAACATTAC
92601 ATCTACTTGT GGTACACTTC TGGGAAAATG GGAATTCTGT TCAGAGGAAT
92651 ATCTGAGAAA AGTTACTCAA GATCTAAATG AGGAAAGAGA ACTATGGTTT
92701 TATAGGAAAT TAGGATTTCA AGTGCTCAAG AAGTTTATAT TGTTTATTTC
92751 TATTTCAAAG GCAAAATTCA GCTTTGTTAT ACTGAAATAC GAATAATTAA
92801 TGTCTAGACT GGGGTTGGTG CCTCACGCCT GTAATCCCAC CACTTTGGGG
92851 GGCTGATGCA GGAGTTCAAG ACCAGCGTGG GCAACATAAG GAGACTTCAT
92901 CCCTACCTGG GGAAGGAAAA AAAAAAAAGA AGGAAGAAGC AGTGTCTAAA
92951 GTATCTGCCC CTGGCAACGT TTGTTCAAAA GTGTTCATTA TGTTTCTTCC
93001 TTTTTTCTTT TGTGGCTGAA AATGTATTTA CAATTCACCG TAAATGATAA
93051 AAATGGCATT GGCACACATA TTTGTATGTT TGTGAACTTG GATTTTTTTC
93101 TAGCTTACAG TCTACTTTTG GAGATTTGTG CAATTTTTCT TTAGTTAAGA
93151 AATAAGTATA AATATAACCG ATTTACGGAC TATCAGGCTA CATCCTGATC
93201 TGATAGTCCA TTTTCATACT ATTAGGAAAG TATAGCCGAA CCAACTTAAG
93251 GTAAGTTTCC TGGAATATAG ATCTGTTGTG ACAGGATTAA CTTTACCATC
93301 CAACCTCTTT CATAGCTTCT GTAGTCAAGA GAACATTTAT TGTGTGTCCTTT
93351 CTTAAAAAGA TGAGTAGAAA TTCTTTTTCT TTTTTTTCTT TTTTCCAGAC
93401 AGGGTCTTGT TAAGTTGCTC AGGCTGGCTT CAAGCAACCC TCCTGCCTCA
93451 GCTAGGATTA CAGGTGCAAG CCACCACACC CAGCTTTAAA AAAAAAATTC
93501 TCTTTGGTAC TACCACATGA ACACACCTAG AGAAATCATA ACTCAGCTTT
93551 GCTAATACTA GACATTTACC AAAGGAAAAG TGGTAGATGA CTGTCTAGTT
93601 ATTTTTTGGTT ATATATTTAT AATTTGTAAA TTAATTTCAC ATATATTACT
93651 TCATTTGACT TTCACAATAA ACCAGTAAAG CAGATAAAAT AAATATTAGC
93701 TCCAATTTTA CAGACTGAAA AACAGATCTA TTGTTAATAG AGACGTTAAG
93751 TGATTTTCCA AGAATTACAT GTCAGTAAAC AGCAGAGCAG GAGTTAGTTC
93801 TCTTCCACTG TGCTTACCTG GTAGCAAAAT CAGTCTACAG TCTTAATAGC
93851 ATATTGGGCC ACTTCCCTGG ATATATTACC AAATGTGTCC ATCTTATTAG
93901 GGGAAAAATG AGTATGCCTA AGGAAATTTA ATAAGCATGT TATTTCTTCA
93951 GGTAAATAAA ATTTCATAGT GGAAGGTGAG TTAGACAATG TTATAGATAC
94001 TTTTGTGATC AGGAGATGGC AAATCAGATG GTGCACAGAA CAATAAAGTC
94051 TCTGTTAATT CTGTTAATAA ACCATGCCTT TTTTCTGCTT TCCCTTCTTC
94101 CAGGCATGTT TTCTTACAAA ATATGTTGAC ATTGTTCATT TGAGATTTTC
94151 TCTTTCTCAT AACGGTGCCC GTTATCGCAC CGAATGCAGC ACGGTAGAGG
94201 AAAGATCAGA TAGCTAAATG CCATACAGGT GTTTAAATCT CCTCTTTGGT
94251 TATGTACTGA GTTTGTCACT TTGTTGTAAT TTAAGGTTTG AATTATGGAT
94301 ACTTAACCAG GAATGGGACA CTAGTTTCCT CCTTATACAG GGAAAAGGTG
94351 TCTCATATCC TTCAAAAGAC TAGTAAAGTA GATGATGTTC AATTCCTACT
94401 AAACCCTTTA TTGACTGTTG AGGGGACACA TATATGAGAC GTAAAAATTT
94451 GCTCTGAAGG AGCATAAACC TAGTACATGT AATTAAAAAT GGCTACAGTT
94501 TATAAAGCAC TTTTACATAC ATTCTCTTAT TTAATATTCA CAACAATGCA
94551 GTACCTGTGG TGTATCCTCT TTATTTCATG GAAGGGAAGA CTAAGGCCCG
94601 GAAAGATTAA ATAACTTGCT CAGCCAGGCA CAGTGGCTCA CGCCTATAAT
94651 CTCACCACTT TGGGAGAATG AAGTGGAAGG ATCACTTGAG CCCAGCAGTT
94701 CAAGACCAGC TTGAGCAACA TAGTGAGATT CCATCTCTAC AAAAAGTAAT
94751 TTAAAAAAAT TATCTGGGCA TGGTGGTGCA TGCCTGTGGT CCCAGCTACT
94801 TGGGAGGCTG GGGTGGAAGG ATCGCATGAG CCCAGGAGGT CAAGGCTGCA
94851 GTGAGCCATG ATGGTGCGAC TGCACTCCAG CCTGGGTGAC TGAGTAAGAC
94901 CCTATCTCTA AAAAAAATTA TAAAGTATTC TAAAGGAAGA ACAGATTGAA
94951 CAATTTTTAA TTTATTTGTC TCCTCCTCCT AGTGGCACACC TTTTAAATAT
95001 GGAAGGTGAA GAAATAAAGA GCCAGTGTG GTGGTACACA TCTGTAGTCC
95051 TAACTACTCA GGAGGCTGAG GCAGGAGGAT TGCTGGAGCC CAGGAGTTCA
95101 AGGCTGTGGT GTGCTATGAT TGTGCCACTG CACGCCAGCC TGGGTAACAG
95151 AGCAAGACTC TGTCTCTAAA AAACAGATAA TAAATAAAGA AGTAACTTGC
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FIGURE 3-28

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95201 TTGAGGTCAC AGAGATAGTG ACTGATAATT ATTACTGTAG TACTTTTATG
95251 TAAGAGGCAG TATTGTATAG TGGTTTAAAA GTGAAGGTTC TGGGCCTGGT
95301 GCGGTGGCTC ACCCCTGTAA TCCCAGCACT TTGGGAGGCC AAGGCAGGTG
95351 TATCACCAGA GGTCAGGAAT TTGTGACCAG CCTGGCCAAC ATGGTGAAAC
95401 CCTGTCTCTA CTAAAAGTAC AAAAATTAGC TGGACGTGAT TGCTTGCACC
95451 TGTAATCTCA GCTACTCAGG AGGCTGAGGC AGGAGAATCG CTTGAACTTG
95501 GGAGGCAGAG GTTGCAGTGA GCTGAGACCG CGCCATTGCA CTCCAGCCTG
95551 GGTGACAAGA GCGAAACTCC ATCTCAAAAA AAAAAAAAAA AAAAGTTCTG
95601 AAGTAAGACA GATCTGGATT TAAATTCAGG TTTTGTTTCT TACTAGTTGC
95651 ATAACCTTGG GCATCCTCTG TAAGCATCAG TTTCCTCATC TATGGAGATA
95701 AACCCAATTT TGCAGAGTTG TGAGGATTAG ATAAAATGTA TGTGAAACAT
95751 CTACCTCAGT TCTGGCATAA AAATGGGAGT TATTTTAATG TAAGGCAATG
95801 TGATTGCCAA CTTGAGATAG AAGTAAATTT TGAAAGGAGA AAGATAATAC
95851 CCATTTGGAA AAGTGGTTTT AAAAAGTTTC ATAGCATTGG AGTTGGGCCT
95901 TGAGCATGAG ATTTTGTGTA CAAATCTGAT CTTTGATCAA CTAGGGAACT
95951 AACTTACCAG TTTAGGTCTT TGAAGATTCA GAAATACAAT GGAGTGCTCT
96001 CATTGCTATG TTAAAAATTC TAAGATCTTA TTAGATTGTA CATGATGATT
96051 TGAGAGAGAA TATGTATGCT TGCTTTTCAAA GTGAGGTTGG AGGTTTGATC
96101 TTCTCGTAGT TGACGTTTCA AAAAGAAGAA TTAGATTGCC TCCTCGAAGC
96151 TAAATTTACC TTTCTTTTAG GCCTTCCCAC TTAAAATCTT TTTTAGAAGG
96201 ATACAAATCT TATAGATCAA TTTAGATGAG GCCTAACTTT CTAAAAACGA
96251 TTCCTAGTAG CAGCTGCATC AGTTTTTATG AATTGCCCCT TTTGCCTGAG
96301 AGTTGTTTTG TTTTGTTTTC TGGAATCTTT TTTTGTTTTG TTTTGTTTTG
96351 CTTTGTTTTT GTTTTCGTTT TTTTTTGAGA CGGAGTCTTG CTCTGTCTCC
96401 CAGGCTGGAG TGCAGTGGTG CAATCCCGGC TCACTGCAAC CTCTACTTCC
96451 CGGATTCAAG TGATTCTCCT GCCTCAACCT CCCTAGTAGC TGGGATTACA
96501 GGCGCCTGCC ACCACACCTG ACTTAATTTT TTGTATTTTT AGTAGAGACA
96551 GGGTTTTGCC ACATTGGCCA GGCTGGTCCC GAACTCCTGA CCTCAGGTGA
96601 TCCACCCATC TTGGCCTCCC AAAATGCTGG GATTACGGGT GTGAGCCACC
96651 ACGCCTGGCC TCTGGGTTTC TTTTTTTTTT TTTTTTTTTT TTTTCTTTTT
96701 AACGGCTCCT CTGACTCCTC TCATTTAGCT TTCAGGAGCA TAAACTCTCT
96751 TGGTTTTCTG CCTACCTCCA CATCACTCCT CCTTAGTTTC TTTGCTCACT
96801 TCTTCTTTTT CCCACTGACC CCTGAATATC AGCATGTCCT AGGGCTTGTC
96851 CCCTGATCTT TTTCTCCATG TATTCTACTG GTGGTTTCAT CCAGTCTCCT
96901 AAGTTCATAC ATCACGTATA TGTCAATGAC TTCAAATTTA TAATTCTGGT
96951 CCAGACCTTT TCCCTGAATC CTCCACCAGA GCTGTATATC CAGCTGCTTA
97001 CTTAACATCT CCACTTGGGT AACTGCTAGG TGTTTCAGAC TTACCCTGTC
97051 TAACCCTGAG GTCTTGATCT TACCCCTTAA AACTTACTCT GCCCCCAGCC
97101 ATCCTCATCT CAGGAGCTGG CAATTCCGCC CTTTCAGTTG ATCAGACTCA
97151 AAACTTTGGA GTCATCCTTG GCTCTTCTTT CTTGCACACC ATAGTCCTGA
97201 TCCAGTGAAG AAATCCTGGT GGCTTTTCTT TCAAAATATA TCCAGGATCT
97251 GACCACCTCT CACCATCCTC ACTACTCATA CCTTAGCCCA GGCTACCACG
97301 TACCCCTAGC CTGGATCACT GCCAGAGCCT CCTAACTGGT CTCTCTGTTC
97351 CTTCTCTGCC CCGCGGAGTT TGTTCTCTAT GAAGAAGCCA CAGGCATTCT
97401 TTCTAAACAT AAGTCACTCT GCTCAGAATC CTTCAATGGC TTCCCATTTC
97451 CCTAAGAGTA AAAACCAATA TCCTTACAGT GACCTACAAG GTCCTTCACA
97501 ATCTGGCCCC CACTACCTCT CCGAGCTTCC ATCGCTGTCC CTTGCCCACT
97551 CTGCTTCTGC CATTCGCCTT TTAATGGGGC TCACTCTGAC TACCTGCTTG
97601 AAACTTCCTG CGTCCCTTTT CCCCTGAGTA TTCACAAACC GCTCCTAGTA
97651 CTCCTTTTCT TTTTTTGTAG CACTTAATAC TTTCTAACAT TATCTATTTT
97701 ACTTCTTTAT TGTAGTCATT GCTTACTATC CGTATATTTA CACGTCTGCT
97751 AGAATGTAAA CACCACAAGG GTAAGGATCT ATTTCATTCA GTGGTAGATC
97801 CCAAGCATCT AGCACAGTGC CTAGCACACA CTGGGTGCTC AAATATTTGT
97851 TGAATGACTA AATATATTCT GGGTGAGTCT GAAGTGACAC TGTATAAGTA
97901 ATGTTCATTT TTTCATCATT TGGATCTTTA AAATTCTCTA CTTTGATGCT
97951 ATAATGATTT TTCACATTCT GTACTTGCAG GACATGGTGT TATTAATATT
98001 TATTCAATAC TTATTCAACA AATAAGCTCA AACTAAGGAA ACCTCGGAAT
98051 AATTGAGTAA CCAGTAATGC TGTCCGTTGA TGGAGGAGAG AGTTGGTGTG
98101 TTTTGCTCTG ATTCACTTAT GCCTTTGCTG AAATTTTAAG ATAAATAGAA
98151 GAAATTTCTG GTCCCTCAAG TAACTGTGTC TTCAGTACCC ACTGAAAAAT
98201 CTCAAAGAGT CTGGAGTGGT GTGTTTAAGA ATAGGATGCA GGATGCAGAA
98251 CCATAACCAG GCCTCAGGTC TGCATAGCTT TGGTCGAGCA TTGAGCATAG
98301 GGCCTCGTGA GATAACTGAT AAATGCCAAA TATGACAATG ATAAATGCCA
98351 AATATGACAA TGATAAATGC CGAAGAATGA CAGTGACAAT GATAATGAAG
98401 TTACCAAAAA TGATGGTAAC TTTTCTCATT GGCATGAAAT GCTCTATCTC
98451 CAATCTGAAG CTGATGATGT AGTTTCAGTT ACTCTCATCT CTCTCCCCTG
98501 CTACTCAGAT TGAAAATCAG CTACTTAGTA CCTGTGTTCT TTGACTCTAG
98551 ACCATATCAT TGGGTCAAAT TTCAGTTTTT AAATTTTAGA TCCACATGGT
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FIGURE 3-29

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 98601 TCTCTGTCAA GAAGATGACT GACTCATATT GAAATCTGTA AAATATGTAT
 98651 TCATTAGCCT GTTTTTTAAA AACTCCCTTA TAAGTGGGTT GACTTTGTGG
 98701 CAGATAGTAA TTGACTGTTC TCAAAAGAAA CTTTGACCTG GTAGGAAGAT
 98751 CCCATTTACC TGATGCTATG GTTCAAGACA GACAGATCAT TTGCTTGCTA
 98801 GCAGGGCAAT TAGGTGAACT TCAAGTCCAC TAGTAATTGG AAATGATTTT
 98851 TTTTTTTTTT TGAGACTCAG TCTCATTCTG TCGCCCAGGC TGGAGTGCAG
 98901 CGGCATGCTC TCGGCTCACT GCAACCTTCA CCTCCTGGGT TCAAGCGATT
 98951 CTTCTGCCTC AGCCTCCCGA GTAGCTGGGA TTACAGGTAC CTGCCACCAC
 99001 GCCTGACTAA TTTTTGTATT TTTGGTAGAG ATGGGTTTCA CCATGTTGGC
 99051 CAGGTTGGTC TCAAACTCCT GACCTCAGGT GATCTGTCTG CCTCGGCCTC
 99101 CCAAAGTGCT GGGTTATAGG CATTAACCAC CGCCCCTGGC CATGAATTGT
 99151 ATTTTTAAAC CAGAAATGAA AATTTGAGAC TAATAAGTCA GTACAGGGAG
 99201 CATGTAAACC TCGAAAGGTA TTTTTTAGCT TTGAGTAGTG CCAGATGCTG
 99251 CCAAGGGTCA ATCAACACTG GAATGTAGCT ATTAGACCTT GCTAGGCAGA
 99301 GCACCTCCAT TTACACTGTG GTCAGAGCAG CAGTACTGCT CCAAGCCAGA
 99351 GCTAAGGGCG CTGAGCCACG CAAATAGGAA CAGCATACAA GCCTTCATCT
 99401 CTCTGTGGCT TCCTCAGAGG GAGATTCATG TAACATTTGC CAAGAATTGA
 99451 TTATGTGTCA AGCACTTCCC CAAAATCTCA CAGAACCACC ACAAGGATGA
 99501 GTGTAATAAA TAACACATAC TTAGAGCCAA GGAAACAATT CTGCAAAGCT
 99551 GTGCTTGTTC AAAGCCATTC GCATTATGCT TAAAGCTGGG ATTTGAACAC
 99601 AGGTTTCAGA CAAATATGTC TGAAATATAC TCTTTTTATG AAGGAGTCTG
 99651 CATTCCTTCA TTGCTAATCC AGAGATAGGA GTGCTGCTAT TTTCAGCCAT
 99701 ACTGGGCCTA CACCAAAGAT TGCTTTGCAC GTTTCCCTTC TGTTCTCTCA
 99751 GAACGAAGAA CAGAGGCCAT GTTGAGCTGT TCCAGCGCTC AGAGCATGCT
 99801 TCACAGCCAG GGAGAAAACT CTGGAGGAAA CCAGCTTTTG TTTTGATATA
 99851 ATTAATGGGA ATGAGAAAAT ATCTATACCC TTATTTTCAG CCCCAACTTC
 99901 TCTTTTGATC TCAAGTACAT TGTGAATATG AGAAAACTGA GGCCATGCAG
 99951 TTACTTTTCA CAACCTGTGA CAAGCAGAAC ATGGACCATA CATAGCTTTG
100001 TGTTCAATTT TGCTTTCTAC AGTAAACATT AAGCATAACA GAAGAACAAA
100051 AATGGACATG TACAAATTTA TAGCAAGATC TATCCTTTAT TTGATTAACA
100101 TAAATACTAT TGCAGGAAAA TGGAAAAAGG TAAACTGCTT GAAATTTAGT
100151 CACATATAAA CGCTCCGAGG CCACTGGTGG ATCATTAGTC TCCTGAGAGA
100201 GCTCTAAAGA ATTAGTGTGT TGGAAAACTG TTCCCTCCTG TTAATGTGTA
100251 AATTTCACCA GTGGGTTTTT TTTTTTTTA AGACAGGGTC TCACTCTCTT
100301 GTCCAGGCTG GTATGCAGGG GTGCAATCAC ACCTCACTGT AGCTTCGACC
100351 TCCCGGACTC AAGCAATCCT CCCACCTCAG CCTCCCAAGT AGCTAGGACC
100401 ACAGGTGCAC ACCACCACAC ATGGCTAATT TTTAATTTTT TGTAGAGATG
100451 GGGTTCTCAC CACATTGCCC AGGCTGGTCT CAAACTTCTG TGCTCAAACA
100501 ATCCTCCTGC CTTGGCTCCC TGCCAAAGCA CTGGGATTAC AGGTGCAAGC
100551 CACTACATCT GGCCTTCACT AGGTTTTTCA TTTTGTTTTG CATGTGTCTC
100601 AGGTTTTATT TGATAAAATG CAGTATACTT TGAATCATCT CAAATTTCAT
100651 TTCTAATATG GACATTGGCA TGTCTCAAAT CCTTGGACTA ATAATCAAAT
100701 TAAAGTTTGT TCAAGTTTGA GGAACCTAAA TTAGCCAATT AGATAAGGGT
100751 CCTTTCATGT TTTTATATCA ACTAGAAAAT AAATTGTTTT GATATGGGAT
100801 GAATAGAAAT AGAAATCTTA ATTTGAAGAA TCTTCCCCTT GTGAGGCTAT
100851 ACTAAATGGC TTTTGCCTGA TATTTACAAG GTGGCTTTGG GTTGTGAGGA
100901 GAGTTGTCTG ATCCATTGAG AGTACATTTC TTACCTTCAA CATCTAGGGC
100951 ATCCTTTGGG AGAAGCCCTT GTAGTCACTA ACTCTAAGGA TCATAGAGCA
101001 TAAGGGTAAG CAGGCCTTCT TATGTATTCA TGCTATCAGG AAGGGTCTTT
101051 AGCACCCAAA CAAAGTTCTA GGGGCTGTAC ATTGCTGATG TGTTAACCCT
101101 CAGCTGCCCA TGTAGCATCT ATTTACCCCT ATGCTTTCCC CACTTTCTAT
101151 CCCTATCATT ATATCTCTGG CTCTTTTGCC CCTCTCTCCT TGGGCAGCTT
101201 ACTTGTAATT AGAAAGTTTA TATTCCCTCA TAACATATTG TAAAAGTGCT
101251 CATTTAAAGG GCAATGCACA CCAAATTGGA GGTGTATAAT TGCAAACATG
101301 GAATCCCTAT ATCTCTGTTA TGCAATCCCT GTATCTCTGT ATCCATGTTA
101351 AATTGAACTG ATGCTTTTTT GAAGTAAAAT GGTAAGAACA GTGGCAACAT
101401 CTAGTCTTCA GAGCATAGTT TAAGATTTTT GCCCAATCCT CCAACCCATG
101451 CAATGGTGTG CTTTGAAAAC CACAGGTTTC TTTTAGACAA ATACAACATT
101501 TATTTCCCGC ATTTCTTTTT GATTTAACAT TTTAGTTAAC ATTTTTATTA
101551 ACATTTTAGT CTACAAGATG CTTCCACATT ATCTCTCATT GGAGTCTCAG
101601 GACCACTGTG TGAAATGGGC AATATCAGGG CTTCTATCTA GCAAGAAAAG
101651 AACCAGATTT GGGGTGGCGA AACAACTTGC TCAGGGTTGC AAGGATGGTA
101701 CATGGTGCAG CCAGGGCTTG AGCTTGGGTC TTCTTAAAAG TGTGGCTTTT
101751 AAATAAAATA CTTAAGTGCC TGCCAAAAAA GTATAAACATT AACTTAGGAC
101801 CTGAAAGGCA TTGTACAGAT CAGGTAGTTG CACTCCTCCC CCTGCCCCTAC
101851 AAAAAAAGAA AGGTAAAGGA ACGAAGGCAT GGAATAGTTA AGTTGCTTGC
101901 CAAAAGCCAC AGTTATAAAA GTAGCAGAAC TGGGTGTAAT ACCCAAGAAC
101951 ATCCATGGAA AATAAATGGA AGCTTATTAC AGCCCAGCCT GTAAATATGT
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FIGURE 3-30

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102001 ACATAGAAAC AGAATGTGTA TGTAGAAACA AAATTATTAG AGGAGTGAAA
102051 TTAGTTTCTG TCCTAACCCT GGTCAACTCA TAGGGTTCAT TTCCCAATCA
102101 GGAGGTTGCT TTGCCATTTT GACATGATCC ATTTTCTCAG AGTTGCCAAG
102151 AGCAATTGCA ACTGGCTTTG TTGTCTTTCT TTCATGGATC TATTTGGAGC
102201 TCAGGGACAA GGTTGTTATG CGGCAGATTG TCCCTGACAA TGCAAGGCTC
102251 ACAGTAGTAT CCTTATAAAC CAAAGTTCAC TGTACACTGG GCCAGGAATG
102301 GGCTGCTGAA GGTGACCTCT CCTTCATGTT GGTTGGTTTA TCTTTGTTGG
102351 TTGGTTGTGT TTATCTCTGT TCACTATAAG GTTCTGACAG AAGCAAAGTC
102401 TTGGTCCCCG TTACATGTCC CCAGCCTGGT GGATGATGGT TACAGAGTGC
102451 TGGAAACTTT TTTATTTATT TAAAATGGAG TTACGTAACT GAAGAGTTGC
102501 CCTATCTCAG TCAGCACTGC AACCAATTAA AATAGAAAGG CTTAAAATAT
102551 TAATTTTGTT TTTAGCCTAG AGTCTTAAAT ACTAGGGTTT AAAAGTTTCA
102601 TTTACTTTCT CTCTCCCTCT CTCCCTCTCT CCCTCTCTCC CTCCCTTCCT
102651 TCTTTCTTCC CTCCCTCCCT TCTTTCCTTT TTCCTTTTTC TTAACTATGC
102701 AGAATGCTTT GCTACTTTGC AGAATGCTTT GCTACTTTGC AAAATAAAGA
102751 GTAATCACTT TGCTTTTTCT TCAAGACTTT CAAATTTAAG TAATTTTGTT
102801 TTTCTATTTT TCATTCAAAA ATAGGGTTAT AACATTTCCT TGACACAAGG
102851 ATATATATAT ATATTTAGAG ACAGGGTCTT GCTATGTTGC TTAGGCTGGC
102901 CTTGAACTCC TGGTGTCAAG TGATCCTCCT GTCTCAGCCT TCCCAAGTGC
102951 TGGGATCACA GGCATGAGCC ACTGTACTCA GCCTTTATTA ATCTAAATAT
103001 GATAATTTAC CCACTGAGAT TCATTTGTGC TGATTAAATT TACTCTCAAT
103051 CCCTATATGT ATTTCTTGTA TTTTTGTTGT TGTTATGTGG CCTGGAAATG
103101 TTTCCTTTAT TCATTCATTC ATTCCCTTCG CAATTAACTT CCAAAAAGGC
103151 TATGAAGATA TTTATGCACA TATACATTTT ATGATTCAAC TCTCATGGTA
103201 ACCTTTTATA AGGAAAGCAG TGCTAATAGT GGTTCTTCTA CTAATAGATA
103251 AGAACATTGA GGCTCAGAGA GGTTTAAAAG GTTTGCCTAA GGTTGCACAG
103301 TTAAGTAACA GAGTTGCCAT TAGAATAGAT TTCCAGTTTA TTCTAATGGC
103351 AACCTTAATT ATTGTTGTTT GACTTGCTCT AATTATAAAT CAGTTAAACA
103401 GATTCAGGCA TTCATTTGAG TATCTATTGT GTGCCATAGA CATTCTAGAT
103451 GTGGGGATAC AATGCTAAGA ACAGATACTT TCTCATACAC AGCTCAATAA
103501 ACAAGTAAAT TCATAAAGAA ACAAAGTAGT TTTCAAATAG TGATATTTTC
103551 TTCAAAGGAA ACAAATTGAG ATGGAAGGTG ATGGTAAGAG ATGGTAAGAG
103601 ACAACTTTGG CCAGTCAGGG ACAACCTCAT TGAAAAGCTG ATAGTAAGTA
103651 CATCCTTTGG GTAAAGGGTA GTATAAGGTA CTTTGAAGGT ACAAAAATAA
103701 GACAGCTTTC TATTGCCCTT GGGAGGCCTA TAACAGAATT TCTCAAGTCT
103751 CTAAGGCCAA TCAAGAGTTG GATTTTTTTA TCCAACTTAT TTTTAATTGA
103801 TGTATTATTA AAAATCTGCA TATCAAAAAT GAAAATGTCT TGCATACTTT
103851 GCTGTAGGAC CCAATCATTG TTTTTTCTTC ATATACTGCA TTAATCTGTT
103901 TTCACACTGC TAATAAAGAC TTACCTGAGA CCAGGTAATT TAGGAAGAAA
103951 AAGAGGTTTA ATGGACTTAA AGTTCCACAT GGCTGGGTAG GCTTCACAGT
104001 CATGGTGGAA GATGGAGGAG GATCAAAGGC ATGTCTTACA TGGTGGCAGG
104051 CAGGGGAGTA TGTGCAGGGG AACTGCCCTT TATAAAACCA TCAGATCACA
104101 TGAGACTTAT TCACTGTCAC GAGAATAGCA CAAGAAAAAC CTGTCCCCAT
104151 GATTTAATTA CCTCCCACCA GCTTGCTCCC ATGATATGTG GGGATTATGG
104201 GAGCTACAAT TCAAGATGAA ATTTGGGTAG GGAACACAGC CAAACCATAT
104251 CATTCTGCCC CTGGCTCCTC CCAAATTTCA TGGCCTCACA TTTCAAAACT
104301 AATTATGCCT TCCTAATAGT CCCTCAAAGT CTTAACTCAT TTCAGCATTA
104351 ACTCAAAAGT CCACAGTCCA AAGTCTCATC TGAGACAAGG CAAGTCCCCT
104401 CTGCCTATGA ATCTGTGAAA TCGAAAGCAA GTTAGTTACT TCCTAGATAC
104451 AATAGGGGTA CATGCATTGG GTAAATACAC CCATTCCAAA TGGGAGACAT
104501 TGGCCAAAAT AAAGGGGCTA CAGGCCCCAT GCAAGTCTGA AATCCAATAG
104551 GGCAGTCATT AAACCTTAAA GTTCCAAAAC GATCTTCTTT GATTCCATGT
104601 CTCACATTCA GGGCACATTG ATGTAAGAGG TGTTCTCCCA TGGCCTTGGG
104651 AAGCTCTGCC CCTGTGGCTT TGCAGGGTAC AACCCCCCTT CTGGCTGCTT
104701 TCATGGGCTG GCATTGAGTG TCTGCAGGTT TTCCAGATGC ACAGTGTAGG
104751 CTGTCAGTGG ATCTACCATT CTGGGGTCTG GAGGACGGTA GCCCTCTTCT
104801 CATAGCTCCA CTAGGCAGTG CCCCACTGGG GACTCTGTGT AGGGGCTCCA
104851 GTCCCACATT TCCCTTCCAC ACTGCCTTAG CAGAGGTTCT TCATGAGGTT
104901 CCTGCCCCTG CAGCAAACTT CTGCCTGGAC ATCCAGGCAT TTCCATACAT
104951 CCTCTGAAAT CTAGGTGGAG GTTCCCAACC TCAATTCTTG ATTTCTGTGC
105001 ACCCGCAGAC TCAACACCAT GTGGAAGCTG CCAAGGCTTG GGGCTTGCAC
105051 CCTCTGAAGC CATGGCCTGA GCTGTACCTT AGCCCCTTTT AGCCATGGCT
105101 GGTGCAGCTA GGATACAGTA CACTAAGTCC CTAAGCTGCA CACAGCAGGG
105151 GGGCCACACA GCAGGGGGAC TCTGGGCCTG GCCCATGAAA TCATTTTTTC
105201 CTTCTGGGCC TCCAGGCCTA TGATGGGAAG GGCTACGTTG AAGGTCTCTG
105251 ACATGCCTTG GGGACGTTTT CACCATTGTC TTGGCAATTA ACATTGAGCT
105301 TCTTGTCACT TATGCAAATT CTGCAAATGT CTGCAGCTGG CTTGAACTTC
105351 TCCCCAGAAA ATGGGTTTTT CTTTTTCTTC TTCCTTTTTT ATTATTATAC
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FIGURE 3-31

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105401 TTTAAGTTAT GGAATACATG TGCAGAACGT GCAGGTTTGT TACATAGGCA
105451 TACATATGCC ATGGTAGTTT GCTGTATCCA TCAACCTGTC ATCTACATTA
105501 GGTATTTCTC CTAATGCTAT CCCTCCTGTA GCCCCCGACT CCCCTGACCA
105551 GCCCTGGAAT GTGATGTTCC CCTCCCTGTG TCCATGTGTT CTGATTGTTC
105601 AATTCCCACT TATGAGTGAG AGCATGTGGT GTTTGGTTTT CTAATCCTGT
105651 TTTAGTTTCC TGAGAATGAT GGTTTCCAGC TTCATCCATG TCCCTGCAAA
105701 GGACATGAAC TCATCCTTTT TTATGGCTGC ATAGTATTCC ATGGTGTATA
105751 TGTGCCACTT TTTCTTTATC CAGTCTATCA TTGATGGGCA TTTGGGTTGG
105801 TTCCAAGTCT TTGCTATTGT GAATAGTGCT GCAATAAACA TATGTGTGCA
105851 TGTGTCTTTA TAATAGAATG ATTTATAATC CTTTGGGTAT ATAACCAGTA
105901 ATGGGATTGC TGGGTCAAAT GGTATTTCTG GTTCAAGTTC CTTGAGGAAT
105951 TGCCACACTA TCTTCCACAA TGGTTGAACT AATTTACACT CCCACCAACA
106001 GTGTAAAAGC GTTTTTATTT CTCCACATCC TCTCCAGCAT CTGTTGTTTC
106051 CTGACATTTT AATGATTGCC ATTCTAACTG GCGTGAGATA GTATCTCATT
106101 GTGGTTTTGA TTTGCATTTC TCTAATGACC AGTGATGATC TTTTTTTTA
106151 TATATATTTG TTGGCTGCAA AAATGTCTTC TTTTGAAAAG TGTTCATATC
106201 CTTCACCTAC TTTTTGATGG GGTTGTTTGT TTTTTTCTTG TAAATTTGTT
106251 AAAGTTCCTT GTAGATTCTG GATATTAACC CTTTGTCAGA TGGATAGATT
106301 GCAAAAATTT TCTCCCATTC TGTAGGTTGC CTGTTCACTC TGATGGTAGT
106351 TCCTTTTGCT GTGCAGAAGC GCTTTAGTTT AATTAGATCC AATTTGTCAA
106401 TTTTGGCTTT TGTTGCCATT GCTTTTGGTG TTGTAGTCAT GAAGTCTTTG
106451 CCCATGCCTA TGTCCTGAAT GGTATTGCCT AGGTTTTCTT CTAAGGTTTT
106501 TATGGTTCTG TTGCATCGTC AGGCTGCAAA TTTTCCAAAC TTTTATGCTC
106551 TGCTTCCTCT TGAACACTTT GCTGCTTAGA AATTTTTTCC ACCGGATACC
106601 CCAAATCATC CTCTCAAGTT CAAAGTTCCA CAGATCTCTA GGGCAGGGAC
106651 AAAATGCCAC CAGTCTCTTT GTATAGCAAG TGTGACCTTT ACTCCAGTTC
106701 CCAACAAATT CCTCATCTCC ATCTGAGACC ACCTCAGAAG CCATTCAACA
106751 GGTCTCTAGG AAGTTCCAAA CTTTCCTACA TCTTCCTTTC TTCTGAGCCC
106801 TCCAAGTCTC TAGGAAGTTT CAAACTTTCC CACATTTTCC TATCTTCTTC
106851 TGAGCCCTCC AGACTGTTCC AACCTCTGCC TGTTACCCAG TTCCAAAGTT
106901 GCTTCCACAT TTTTGGGTAC CTTTACAGCA GCACCCCACT ACCCAGTACC
106951 AATTTACTGT ATTAGTCTGT TCTCATGCTG CTAATAAAGA CATACCCGAA
107001 ACTGGGCAAT TTATAAAGAA AAGAGGTTTA ATGGACTCAC AGTTCCATAT
107051 GGCTGGGGAG GCCTCACAAT CATGGTGGAA GGTGGAGGAG GAGCAAAACC
107101 ATGTCTTACA CGGCAGGAGG CAAGAGTGTG CATGCAGAGG AACTGCCCTT
107151 TATGAAACCA TCAGATCTCA TGAGACTTAT TCACTATCAT GAGAACAGCA
107201 CAGGAAAAAC CCACCCCCAT GATTCAATTA AGTCCCACCA GGTCCCTCCT
107251 AGGACACATG GGGATTTATG GAGTTACAAT TCAAGATGAG ATTTGGATGG
107301 GAACACAGCC AAGCCATATT ATATACTTTA TTAACTACTT ATCTCTTCTA
107351 ATAATACACT TGTTCTCATG TGGTTATTCT TCTTATTACC TTTTTTTTGA
107401 GATGAAGTCT CACTATGTTG CCTAGGCTAG TCTCAAACTC CTGGGCATGA
107451 GCCATCCTCC CACATGGCCT CCCAAAGTGC TGGGATTACA GATGTGAGCC
107501 ATCACTCCTG GTCTCATGTG GTTATTACAG TGAATGATTA AGACACCTTC
107551 TCTCCTTCAC TTTGTCCCTA CTTTTTCTCA GATTTTTTTC AATGATGTCT
107601 ATGCTTTTCT TGTTTTTTTC TAGCTTTTCT AACCTTGCAT TTATTTTCCT
107651 TCAGATCTCA ACATCTGCTG CAATTTGACT GTTCAGGTTA GTGACAATTT
107701 GCCCATTTAT CAGTTTTGTG CCTTAGGCAG TATTCACCAG CATTCTCCTA
107751 CTTGAGATGA ATAAGGATCT TTATTTATCT GACCACTTGT TTACTCATTA
107801 ATGGGGACAT TTAATATTTA CAGAACACTT TCATCAAAAC AAGCCTGTTT
107851 TTTCTTTTCA AAATATAATA TACTAGCATA GGAACTTGAC AGAAGAGGTA
107901 ATAATACAGA AGAAATCTAG AGAACTGATC ATGGAGAAAT AATTAAACTA
107951 AAACAAAGCT GCTGCTTATA GTAAGGTAGA CCAAGTTTGT CCTGTGTTCC
108001 AAATTATACT TAGCCAAAAA TAAATATTTA TAGATAATTG AATAGTAGTT
108051 TTTAGAAATG ATTCATGGAT TACTCAGGGG TGGAAATTAT CCCTGTAATG
108101 TAGGCCCCAA ACTTCTAAAA TATTTATAAT TTGTGAGGGA GAAATAAATC
108151 CACAAACATT TGAAAATATC TAATTTTAAC TTAAATTGAA AAACAGCAGT
108201 AGTGTATTTT TGTTAGGCCC TTATATTGGG TAATATGGT TATGTAAGTA
108251 TGGGAAAGGC TGGTGAAAAC TGTGGATTTA TCTACAAAAT ACATTGGTAC
108301 ATTGGGGAGT TTTGTGTGGG AAGTGTCCTA ACACCTCAGG AAATGCTAAG
108351 GAAGAAATGG GTAGGGTAGA CTGAACACTC CACAGGGTA GGGAGAGCGT
108401 CTTCTCTTCA TTGCTCTAGC CCCAGCACCT AGAATGTGCC TGGCACTCAA
108451 TCTTTTCTTT CCTTTTTTAA CTGATTTCAG GTTGAGTTTA TAGGCTAGCT
108501 GAGTTTATAG GCTGGTAGAG TACAAGGTCT ACTAATTTCT CTACTCATGA
108551 CTACTTTACT TTCTAATAGC ACTTTATGTT CTTCAAGTGC TTTTTTTCTT
108601 TGTTCTTCAA TGTATAATAA GGTGAGAACA GTTTTATCTC CATCTTGCAG
108651 GGAGAAGAGT TAGTTAAGAG ACTTTCTCAG GTCACACACA TATAGTTAAT
108701 GACAAGGTGA GGTTTAAACC TTAAATAATA GAAATAAAAG TGATTTTATA
108751 ATTATCTAGA GTAGTTTCAA TGTGAAATAA CTTAAAGGTA TGGAAATGGA
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FIGURE 3-32

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108801 TGCCAAGAAG TATAGTCAGT CTTGCTGGAG TAAAATAATG CCCAGTGCTT
108851 TGTGCCTTCT CCCAGCTGCT GCTTCCAGAA GAACGGGGTG TCTGAGTGTG
108901 AACATCACCC AACAAGTAGG TTAACAGATA TCCACGCCCC TCTTGACCCA
108951 CATACATATC AGTGGGATTT AGAATGCTGC CACATATTGA TGATTGAATT
109001 TATGAAGCAT ATAATATCCT CAATAATAAA CCAAGTGTCC CTGTCCCAAC
109051 TTGTTATCTC TGCTTCTGTG AACACATGTT TTCTTTTATA TGCTCCTTAC
109101 TCCTCAGGTG CTCTCTCAGG GACTTTTCAG TTCCTGTGATT GTGCCTTTTC
109151 AGCATTTTCT CAGAGGACAA TTCTTAGCTT CCTGTTGATT CCTCAAGCAT
109201 TAATTGCTTT TTTCTGCCAG ATATTTCCTT GCTAGGCTCT TGAGCCCTCA
109251 GAGCTGTTCT GAATTATGCA GTGGGAATTG CCCAGGATTA GGAATCACCT
109301 AATGTCCCCA CCACCCCCGC TTCCTTGTGA GGCACTTCTC AACTCTGCAT
109351 CCCTTATACC TTCACAGCAA CCCTGTGTAC CCAAAGCAGT GTCATACTCG
109401 GTGCCTCCTT TTCTCTCCTG AAATAAAATT CCTAGATAAG AAGACCTCTA
109451 TATTCCAGGC CTTGTCTTTG ATTTTAGGGA AAAAAAGAA AACTACCTAT
109501 ATACATAATG TTTTTAAAAA TCAGTAATGT CCCACTCGTT ACAGAAAGGA
109551 GAAATAAAAG AAGTAAGTTA ATGCCTGGGA TACGTGCTAC AACATGGATG
109601 AACCATGAGG ACATTACACC AAGTGAAATA CTCCAGGCAC AAAAGCACGA
109651 ATACTGTATG GTTCCGCTTA GATGAGGTAC CCAGAGAAGT CACATTCATA
109701 AATACTGAAA GTTGTATGGT GGTTTCCAAG GGGAGGGGGA AATGAGGAGT
109751 TATTTAATGG GCACAGAGTT TCAGCTTGAG AGGAGGTGGT GACAGTTGTA
109801 CAACAATGTA AATGTACTTA ATATAGTACA CTTAAAATGG TTAAAATGGC
109851 AAATTTTATG AAATAGGAAT TTATCACGAT AAAAAATTAA AAAGTAAGAA
109901 AAGTTACTGC TTGGGCGAAA GTATATCAAA AAAATAAAAA TAGTCCCCAC
109951 AAATTTCCAA AACAACCCTA ATGAGGTGTT GCTGCCTAAA TGGTGAACCA
110001 AATTGTGAAC CAATGTGTAG TGTTTGAGAC TGGGAAACTG ATGCCCAAGA
110051 TTTTAGCCTC AATAAGGAGT AGAGTTCATA ATTTGACTCC AAAGACATTT
110101 CTTTCCCTAC CATGCCAAGG CCATCTGATT CCCAGTCCAA AGAAGTTTTC
110151 TCTCTGCTCT GTAGGCTGCC TTAATCCAGA GTACACAAGC CTTCCATTTT
110201 CTTATCTGTC CTCCTACCAG GGTGTGGTCC TTTTCCTCCT GAACACTGAC
110251 TGTATAATTA CCAGACAAAA CTAAACATAT TTAAAATATA GGCAGTCCTC
110301 TACATCCAAG GTTCCACATC CTTGGATTCA ACCAACCATG GATTGAAAAT
110351 ATTTGGGGGA AAAAAAAACA ATAAAAAAAC ACTGGCCTGG GCAGCATAGT
110401 GAGATGCCAT CTCTACAAAA ACATTAAAAT ATTAGCTGAG CATTCCAGCA
110451 CTTTGGGAGG CTGAGGCAGG CAGATCACCT GAGGTCAGGA GTTCGAGACC
110501 AGACTGGCCA ACATGGCGAA ACCCTGTCTG TACTAAAAAT ACAAAAATTA
110551 GCCAGGCATG ATGGCAGCTG CCTATAGTCC CAGCTACTCA GGAGGCTGAG
110601 GCAGGGAAAA TTTCTTGAAC CCGTGAAGCA GAGGTTGCAG TTAGCCAAGA
110651 TCCCACCACT GCACTGCAGC CTGGGTGACA GAGTGAAACT CTGTCTCAAA
110701 AAAATAAAAA TAAAAATAAA TAAAAATTAG CTGAGCATAG TGGCATGTGC
110751 CCATGGTCCC AGCTACTTAG GGGGTTGAGG TGGCAGTGAG CTGTGATCGT
110801 GCCACTGCAC TCCAGCCTAG GCAACAGCGA GACCCCATCT CAAAACAAAA
110851 ACAATAAAAC AGAACACAGA TTAAAAACAA AATACAGGCT GGGCTCACTG
110901 GCTTATGCCT GTAATCCCAG AACTTTGAGA GGCCAAGGTG GGAGGATTGC
110951 TTGTGCTCAG GAGTTTTAGA TCAGCCTGGG TAACACGGCA AGACCACATC
111001 TCTACAAACA ACAACAACAG GAGACTATAC TTTCAGGGAC CATTTCTGGG
111051 GATCATAGTT TGTTACTAGA GAAGTTTCTC TGTGTAGAGC ATTGAAATAT
111101 AAAAATGCAG AATAATCATT TACATAGCAT TTACATTGTA TTGGTTATTA
111151 TAAGTAATCT AGAGATTAAT TAAAGTATAC AGGAGGGATAT ACATAGGTTA
111201 CATGCAAATA CTACACCATT TTATATAGGG GACTTGATCA TCCATAGATA
111251 CGGGTATCTG AGGAGGTGTT GGGTTCAGTT CTCCACGGAT ACCAAGAGAC
111301 TAATGTTAAT TTCATTTCCC CAACCTCCAC ACCAGAACTC TGAAATAAGA
111351 ATAAGAAAAG GAGCAGTTGG GATAGACAAT ATCAGAAGTA TGTGGAAATG
111401 ATAACAGTGG AAGGAAAGCT GATCTAGGCC TACTCAACAA ATTTTAATCT
111451 TCATTCTGGT AAAAACAAAT TAGATTTATG GGTGCAAATT TGAGCCAGCA
111501 ATTAGATGGC TCTTAGGATT AATAAAAAAA GACTGAACAT CATGCCTTCC
111551 AAAGACTGAG GGAAAGAGAT AGATAGGAGA CTTTGGCAAA GTAGCACTTT
111601 AGCCAACATC ATTAGCCTAA ATCTTAGTGA AGAGAGGTTA GAAGAAAGGT
111651 AGAATTTTCA TGGAAGGATC CATTTTTCTT CACTTCAGAA TTAAGGGAAA
111701 AATTAGGAAG CTGAATAAGA ACTAATGGCC TAATTTCTTT GTTTCTTTCA
111751 AAAATCAAAT CTTTAAGTTA AAATTTCAAT AACCAACAGA AGAAGGTAGA
111801 ACCAATTTTG TGAATTTACA AAATACTTGC TTATTGACAC TATTGCCAAG
111851 GTCATTAAAT AAGTTATCAA GTTACCTCAG ATCCCAGTGA TTTAAATAAT
111901 GCTTTCTGAA TGTATCCTTT TCTGTTTTAA GAAGAAGCTG TATTAGGTTC
111951 TTGTGTTCCT ATAAAGAAAT ACCTGAGGCC GGATGATTTA TAAAGAAAAG
112001 AGGTTTAATT GGCTCACGGT TCTGCAGGCT GTATAGGAAG CATGGCCCCA
112051 GCATCTGCTC AGTTTTCTGG TGAGGTCTCG GGGAGCTTTT ACTCATGGCG
112101 AAAGCAGAGT GGAAGCAGCA GGTCACTTGA TGAAATTGAG AGCAAGAGTA
112151 TGGGTGGGGA GCTGCCATAC TCTTAACCCA ATCTCTAGTG AACACAAGCA
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FIGURE 3-33

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112201 ATAACTCACT TATCACCAAG GGAATGGTGC TAAGCCACTT GTGATGGATC
112251 CACCTCCAAA ATCCAGTCAC CTCCCACCAG GTCCCACCTC CAACATTGGG
112301 AATCACATTT CAACATGAGA TATGGAAGGG ACAAACATTC AAACCATATC
112351 AGAAGCCTAT CTTAGGCTGG GCACGGTGGC TCACGCCTGT AATCGCAGCA
112401 CTTTGAGAGG CCGAGGCAGG CAGATCATTT GAGGTCAGGA GTTTGAGACC
112451 AGCACGGGCA ACATGGTGAA ACCCCATCTC TACTAAAAAT ACAAAAACTA
112501 GCTGGGCATG GTGGCACACA CCTGTAATCT CAGCTACTCG GGAGGCTGAG
112551 GCAGGAAGCT CTCTTGAACC CGTGGGCAGA GGTTGCAGTG AACTGAGATT
112601 CTGCCACTGC ACTCCAGTCT GGGCAACCGA GTGAGGCTCT GTCTAAAAAA
112651 AAGAGAAGCC TATATTAAAC TTATAAAATT TAATATCATT TCAACTAGCC
112701 TTTTGTTGGG TGCATTTGTT CACTTTGGAC TATTTTTCCA AATTCATGTA
112751 CAGTCGTGCA TCTCTTAACA ATGAGGATAT GTTCTGAGAA ATGCATCCTT
112801 AGGCAATGTC ATTGTTGTGC AAACATCATA GAGTGTACTT AGACAACCCT
112851 ACATGGTGTA GTCACTACAT ACCTAGGCTA TATGGCATAG GTAGAGCCTA
112901 TTGCTCCTAG GCTACAAACC TGTACAGCAT GTTACTGCAC TGAATGCTGT
112951 AGGCAGTTGT AACACATGGT ATTTGTGTAT CTAAACATGG AAAAGGTACA
113001 GTGAAAGTAC AGGATTATAA TCTTATGGAA TCGCTGTTAT ATATGTGGCT
113051 CATCTTTGAC CAGAAATGTT ATTATGTAGC ACATGACTGT AATTCCACTA
113101 TTGATTAGAG ACTCCATAAC CCACACCTAC CTGTTCATTT GCATGCACAT
113151 TTAGCCGATA GGTGACTTTA TCACTAGATC AGTCCAAGAA TAAGTTTAAA
113201 GAGCATGTCC CCTTTTCTTG TTTTTTAATA AATGTAAAAC ATGGAAGTAC
113251 ATGATACCTC AAAGGAGCAT GAATCACAAA CAGGAGTCCA CATTTACAGA
113301 GCCTTTGCAA CCACTTTTAT ATCTTCAAAG TGCTCTACCA AAGTATCGGA
113351 GTCAGTCAGT CATGCAGGTA GGCTGCCAAC CATGGCTGAG CCCTCAGGAG
113401 CTGTCTTGAT GACCAGCATA GACACGGTCT GTTGTGTTCA TTCAAACTTG
113451 CCAGGAACCA AGGATCTGAG AATGGTAAGT CTGGTGTGCC AAGAATGAAA
113501 CTCCAAGAAA GAAACTTCAG AATCAAATTT AAATTTAGGC TGGGTGTGGG
113551 GGCTCATGCC AGTAGTCCCA GCGCTTTGGG AGGCTGAGGT GGGCAGATCA
113601 CCTGAGGTCA GGAGTTTGAG ACCAGCCTGG GCAACATGGT AAAACTCTGT
113651 CTCTGCTAAA AACACAAAAT TAGCTGGGCA TGGTGGTGGA CACCTGTAAT
113701 CCCAGCTACT TGGGAGGCTG ACGCAGGAGA ATTGCTTGAA TCCGGGAGGT
113751 GGAGGTGGCA GTGAGCCGAG ATCACACCAT TGCATTCCAG CCTGGGTGAC
113801 AAGACCAAAA TGCCATCTCA AAAAAAAAAA AAAATCGAAT GTAGGTGGAA
113851 TTAATAAAAA TTTAAATAAA CTAACAGATT AAACCTTTCA TTGTTCAGGA
113901 AGGAACAGAA CAATTTTTGA TAACTTGTGA AATATCTGGC ACAGAAATTA
113951 TTTAGAGCCA CTAAATAATT TCAAATTACC TAAAAATCCT AGTGATTTAT
114001 TTTCTATTTT AAGATGAAGT CTACTTTAAA CTTCTAAAAT GCAGGGTTAT
114051 TTAAACTGGC ATCTAAATCC AAGCTGGTTT TGGTTGGTAA TTCCTCTAGG
114101 ACATTTTACT AAATCTTGAT CTTATCTAAA TGATGCTATG TCATAGATGG
114151 ACTGTTTGTT TTGTTTGTAA TCCAGGGAAA TTAAAAAAAA AAAAAAACAA
114201 GTAGAAATAA AGGCTTTTAA AGAATTTTTA GAGTTAGAAA TGTTTTCAAA
114251 ATTAGGTTCT TTAAACCATT AGCCATCTCT TCCTTCTGAA CTCTTCTTTT
114301 TTCTGCCCTT TGGTAGCTAT GAAATAATCT GCATTCCAGA AACTTCTTTT
114351 TTCCCAGTCC TTTTTCATGT CTTAACAGTG CCATGCATGA TTATCTACAC
114401 CATGGAAACC CATCTTAATG AAATGGAAAG ATCTGCTGTT TAAAAAAAACA
114451 AACAACCAAT CACCCATGCC TCCTACAGTC CTGTTAGGCC AAAGGTCTGC
114501 TCTCCACCTG GTCAGCTGCT GAGGAGGGGG CAGGTACCTG TACCACAGTT
114551 TAGCCACAAC AGAAATATCG TTGGGCTACC AAAAGATGTC AGTCCTTAAA
114601 AATGTTGGCA AGCAAGAAA TTTTTCTCTA AGCACATCTT AGAGATACTT
114651 TAGTCTAAAG GCACAGTTGA TCAGATTAAA GAAGCTAAGA TTACATTTTG
114701 GGGCTGGTCT AATCGATAAA TATCTATCAG TGGCCATAAA GTTTTATTTC
114751 AGTGTTTTCT GGTGTAAAGG GATTAATTTT ATGTACTCAA GTCTATGGAG
114801 TTTGTTTTCT TCCACCTTTA ATCACCTCAC TCGGCTTGCT GGTGTGCAGT
114851 GCTCATGCAA AACTTCCTAA GGGAGTGCCC CACTTGTTTT AATTTACTTC
114901 CTCTAGCAAA AACACAGCTA GAGGAAACAC AAATCGTTTA AAAAAGAAAG
114951 AAAAAAACAA AATAAACTGT CTCATTTCAT TCAGAAGATT TCTGTTCATC
115001 CTACTTTTAA GTCAAAGGGT AGTGTTAAGT TTTGATTTGC AACAAACTCA
115051 GATTATCCAT TAACCCACGC TTGCAGGCTT TCTACTCCCT TTCAGATGTA
115101 CGTCTATTTT TTTAAAGGGC CCAGGCTTTT TGAGTTTACC TTTCAAAAAA
115151 GTATGTTTAG GCAGAATGGT CTTCTAGAGT TATGGAATAG CTTTTCAAAT
115201 GTTGGATGGA TATTTTCTTA GAATTACTCC AAAATGCAGT AAATGAGAAG
115251 CAACAAGCTG AAGCTGCCAG TCTCTGGTAT GAATAGCAGT GAGTAAAAGT
115301 GCTTTGAACT TAGTGTCCGT ATTGGAAAGC AGGAAGTTGA AAGAATCAGT
115351 TTGAATTCCA TAATTGCTGT AAATATTATG TAGCATTTAT TATCCCATTT
115401 TTTGATGTAC CATGTAAATG TAAAACATAC AGGTCCCCTC CCTCCCCTGA
115451 AGAGTTTATT CTCCTAGACA TAAAATGAGT GTACATGCCT AGCCATTGTC
115501 CACCCCTTTC CAGTTCGATG ATGTGTATCT GATGAGGAAG GACAGAGATG
115551 AGAGAATCAA AATCATTATA AACGAATACA GATGATGACT GGGTGACTGA
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FIGURE 3-34

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115601 AATCTTATCT CCCAAAGAGC ATAGTTAACT GCAGCAGCAG TGGATGATAA
115651 CTACTGGGTG GGGGTAGAGG GGTTGTTTTG CTCAGTTCTG CCTAGAAGAC
115701 AGTTGTAGTT ATTTTAGTCC CACAGTCTCT ACTCCTCCCT GGGCCTGTTT
115751 TTGCCCTGCT TTCCTGGCCT CTGTATACGG CCTTTGTTAG CACTTTGTAG
115801 TTGTCAGTCA GCTGTTACTC CAAGTCCTCT GTCAGAAATA AAGTTACTTT
115851 TGTTTGAAGA GTCTCCAGTA ATCCCCCTTC TTTTTAAACT ATGACTCCCC
115901 AAAGATATAT AGTCTAACTT GTGTGCACCA GTATTTTATC ATATTTATTT
115951 AATAAATTCC ATAAACCTTA CATAAAAGAT ATTAAACAAA AAGTACTCAC
116001 CCCCTTAAAA GGAGGAAGAT AATGACCATC AAGGCATGGC CAAATTACAC
116051 AGTCTTAGGA AACAGTACAG TAGGTAATTA TTGGACCTTT TTGATTAATG
116101 GCATCCTTGC TTTGCAGGTG TGTACCACCA CTGCACTTCA CAGGTTTCTG
116151 TAAATAAAGT GATTTGGGGT TCCCTTCTGT TGAGCATTCT TCTATCGTGA
116201 AACCATTTGG TGATGAGAAG CTTGAGTTTC TAATGCATGT TCGTTGGCTT
116251 TATTGGAGCT GCTTTTGTAC TGTGGCCACC CATTTAACTT CCTCTGTGGT
116301 TGATATATGA GAGCTAGAGG ACTCTGCCTT AGCTTCTTCA TCAGAACACC
116351 ATGTGATGTC TCCAAATGTC TTACACTGTG GCTCCCCTGT AAGAGAGGTG
116401 GAGAGGAGAG AGGCCAAGGC TGAGGCCATT CCAGTGAGAT GATCACTTTC
116451 TTAGGCTACT GCCTGAGACC TCTCAAACAG GATCTGTCTG TGGGCTCTAG
116501 TGAGGGGAAA GTAACCGGCC TTCAGTTGGC TGGTCAGAAA CAGTTACCCA
116551 CGGCCGGGTG TGGTGGCTCA TGCCTGTAAT TCCAGCACTT TGGGAGGTCA
116601 AGGGTGGAGG ATTGCTTAAG CCCAGCAGTT TGAGACCAGC CTGGGCAACA
116651 TAACAGGACC ATGTCACTAC AAAAATGATT TAAAAATTAG CTGGATGTGG
116701 TGGCATGTAC CTGTGGTCCC AGGTACTCGG GAGGCTGAGG TAGGAGGATT
116751 GTTTAAGCCC AGGAGGTCGA GGCTGCAGTG AGCTGTGATT GCGCCAGTGC
116801 ACTCAAGCCT GGGCAACAGA GTGAAACTCT GTCTCAAGAA GAAAAAATGT
116851 TTCAGGCACA GTCAGTGTTG AAGATGTCAA TTAGCAAGGT TTTTTTAATC
116901 CCCTGGAAGT GTGCAACCCA GGATTAAACA GATGTTTAAG AACATAAATA
116951 AAAGATGAAT TCCTGGCCGA GCGCGGTGGC TCACACCTGT AATCCCAGCA
117001 CCTTGGGAGG CTGAGGCAAG TGGATCATGA GGTCAGGAGT TCGAGACCAG
117051 CCTGACCAAC ATGGTGAAAC CCCGTCTCTA CTAAAGATAC AAAAATAAGC
117101 CGGGCGTGGT GGCGGGCACC TGTAATTCCA GCTACTCAGG AGGCTGAGGC
117151 AGGGGAATTG CTTGAACCCG GGAGGCGGAG GTTGCAGTGA GCTGAGATCA
117201 TGCCACTGCA CTCCAGCCTG GGTGACAGAG TGAGACTCCA TCAAAAAAAA
117251 AAAAAAAAAA AGATGAATTC CTGACACTTA ATACATTTAG ATAAAGTCTA
117301 ACTTATCTTT AAAGTTAACT TTAAACAACT GCTCTACAGC ATAATATTAT
117351 CCCCTGTGTA GACAGTGACC TCTAGTATAA GCTTTAAATT GGTTTAAAAA
117401 ATAGATTAAG TATGAAAACA TCTCTTCAAC ATTTTCATAT CTCTACAACT
117451 CTTTATTAGA AATATCCATT TTGTCCTATA TTCACTTTCT GCTGAACTAA
117501 AGTGCATGCC AGTCTCCAGA GGATGACAGA TGGGCAGAAA TTTATAAAAC
117551 AGCAGCAGTC ATGGACAGCC TAGGCCACAA GTAGAACATA CCAGACCTCC
117601 TGGGTACTAC TGTCTCAGTG AGAAAGGATC CAGAGATCCA GCATCACCAG
117651 ATTCCCTCAC ATACTGACCA AAGAAACTTT TTTAGTTTGC AGATTTTGGT
117701 GGGAATAGGG AGGAGTATTA GAAGCTGAAG TTCTTGCTTT ATTTAAATAA
117751 TCATGGCAGT AACAAAATTC GGTTAAATAA TGCCCCTTCT AGGCCAGGCG
117801 TGGTGGCTCA TGCACTTTAG GAAGCCGAAG CAGGCAGATC ACTTGAGGTC
117851 AGGAGTTTTG AGACCAGTCT GGCCAACTTG GTGAAACTTC ATCTCTACTA
117901 AAAATACAAA AATTAGCTGG CGGTGGTGGT GCACACCTGT AATCCCAGCC
117951 ACTCTGGAGG CTGAGGGAGG AGAATCGCTT GAACCAGGTA GGTGGAGGTT
118001 GCAGTGAGCT GAGATCACAC CACTGCACTC CAGCCTGGGC GACAGCGAAA
118051 CCCCATCTCA AATAAATAAA TAAATAAATA AATAAATAAA TAAAATAATG
118101 CCCCTTCTAG TTGAAAAACT AAGTTCCTAC CTAAGCATAA TTTGGATTTA
118151 CCCAATTTAT CTTCTTTCAA AATACCTCAA ACATTTCACC TTATTATTCT
118201 TTTTAAGGAT TACAAAGTAG AGCAGGGGGG AAATAATAAA CCACTAATAA
118251 AGAATAATAG CCATTTGACA GACAGGTGTT CTTAGTTTCA TAAAAAAAAA
118301 GATGCCTGGT AGATTCAGTC TTTTATGAAT ACTAAAGAAT GCCTCTTATT
118351 TTTGTTTGTT GGAGACAGGT TCATTTTGAA CCTAACCTGG TGTTCTCAGG
118401 GAACATAGGT TAGAGGGGAG AGATTTAGGA GTGAGGGCTC AAGCAAGAAG
118451 CATGTTAGAA GACTGCTGTA GTGGTCCCGG TGAGGAGTGA AAGGAATGGA
118501 ACTAAAATAC CATGAGGAAC GTGGGCCAAA GGAAACAAGT CTGAGAGATT
118551 TAGAAAGTAA ATCATCAGGA TTCAGTGGTG ACTCTTGGAT TTGAAGAGGG
118601 AAAGGGAATA ATCTAGGGTA GCTGTCAGTT TCTGCCATGG GTAGTTGGGC
118651 TAACAGTAGT GTATTAACTG AAATGGGGGG CAGGCAATTT GTGAGGGTGA
118701 GTTGAGTTCA GCACAGGGCC TGTTGACTTT GAGGTGCCTT TGAAACAGGA
118751 GTGGATATGT CTAATTTTAC ATGAAGTGTC TACTTAAGAG AATGTGTAGA
118801 GACATTAACA GGGCTGGGTA GGAACACGGA ATACCTCAGG TGCCAAATGA
118851 AAACTTTTGG CAATAACAAG AAGTTAGGAA GTTGAAGAGG GTAGAAGAGG
118901 CAGCAGAAAT GTAGATGGAT AAGAACATGT TGGCATGTTT AAGTGACATT
118951 GTGAATAAAC CTGTCCTACT GGGCCAGATG GGATTAGGGC TGAGATCAAA
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FIGURE 3-35

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119001 GCAGGCCTAA TGCAGTTTGC AGACGTGTTT TGTTAGACTT TTGTAGAGCT
119051 GGATCACACA GTGTCCTAAA TTTAAATTAG GTGCCAACAT TTCCACACAA
119101 AATCCGGATT TCTGACTTTT CTTTTAAACT AAAGGGCTCC TAGAGGTAGA
119151 TTTGGCAACA TTGGTAGACC TATATGATAA TAATCGACTG AAGTATATGT
119201 CCTTTCTCTC CAATGAACCT GTTTTACTTA TGTTATTTCG CTGAGCCCTT
119251 AGACATTTAA ATTTTGTACT TTTTTTTTTT AATCCAGGCT TATAAGTCAG
119301 ATGAATTTTC TACTTCTGAG TCAAAGATCA GTAGGTAATA AAGGTACAAA
119351 GATAGATTAG CAACAGATTA CGGAGAGCTT TGAATACCAA TCTAAGGAGT
119401 GTAAATGTAG GCAGTGGGCC ACCTTTGAAT AAGGAATTGA TGAGATTAAA
119451 GCCATATTTA GGAGGATTAT TCTGGACCAG TATGAAAACA CAGAAGTTAG
119501 GGAAAACAGT TAATAGTTTT GAAAGAGAAG AGAAAAAGGA GATGGTGTTG
119551 GGATACATAA ATGGGCTTTT AAAATGCAAA ATGAGAAGTG TTTTAAAGAG
119601 ATATCACCCA GAAAGTCTAT GCACTGCCAC ATGGGCACTA TATGGGTGGT
119651 TGTATTTGGT GGGAAATTTG CTTGCAGACT TCCAGAACTC AGACCAATGT
119701 GTGGTGTGGG GGACGGTGAT TGTCAGGCAT TATGGAAAGG TCAAACAAAA
119751 TATGCTCACT GGCTATCTAT GGCCCACAGG TCACTGTAGT CTCTGTTATA
119801 AGTACACTAA GTGGAGGAGA AAGGTCCTTT AAAAAAAAGA AAGCTAAAAT
119851 TAATACCTGA TTGTTATTAA CTGTGTGCCA AACACTGTTC TAAGCTCTTT
119901 ACACAGACAT TTTATTTAAT CCTCGCAACC AATTTCTGAA GTAGGTACTT
119951 TTCCAATTTC CATTTTACAG ACAAAGAAAC TGAAACCCTA GAGGTTAAGA
120001 AGTTATCCAA AGCCACAAGG CTGATAAGAA CAGAACCAGG ACTTGAACGC
120051 AAGCAGTCTG CCTCTCCAGA GGTTTATCTT TTAACTGCTA TGTTAAACTG
120101 CCCCTGCATT TTAATCTGTT CTAATGCTAC ACAGATAGGC AACTTTACAG
120151 GTAGAGGACC TTATGCTTTA TTCTGGATGC TCTGTTATAA CTCGTTTCAG
120201 GGGTGTCAAT TTGGTCCAGG TCCTCCTGGA AGAAATAAAA CTCCAGAATT
120251 GACCCTTGAA CTGTCTCTTA GGGAGCAGAT AATGTAACGG GTCCTTGGGT
120301 GACCTTGAGA GAACAGGTAT GTTCAAATGT CTGTTCTCTT CCTTTAGCTA
120351 ATGGATCAGT GTAGCTTATA ATTGCATGCT TCTAACCCTT TGTTGAAAAA
120401 TAAAAACTCT TATAAACATG CTTTTTTTTT TTTTTGGAGA CGGAGTCTTG
120451 CTCTGTCGCC CAGGCTGGAG TGCAGTTGTG CAATCAGCTC ACTGCAACCT
120501 CTGCCTCCCG GGTTCAAGCT ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG
120551 GGATTACAGG CATGCGTCAC CACGCCTGGC TAATTTTTAT ATTTTTAGTA
120601 GAGATGAGGT TTCACCACGT TGGCCAGGCT GGTCTCGAAC TCCTGGCCTC
120651 AGGTGATCCA CCCACCTCGA CCTCCCAAAA TGCTGGGATT ACAGGCGTGA
120701 GCCACCATGC CCGGCCTTAA AAATGCTTTT AAAAATGAAA ACTAAAACAT
120751 GTTAATTTTT TTCAAATGTT TTCATGAAAA TTATCACAGG ACAAGTTTCA
120801 TAAATATTGA AATTTTGGAAA AAGTTGCAAG CCTATAACAT TGCAGAAGAG
120851 CAAATGCATT TGATGCAAAG CCTCAAATTT GTCAAGTTTT TCTACCATAT
120901 TCAGTGTGGT TTCTTTCTCT TTGGCCTATA GATGAAACAT GTAAATGAAA
120951 GATTTCAAGA TGAAAAAAAT AAAGAGGTTG TTCTCATGTG CATTGGCGTC
121001 ACTTCAGGAG TTGGACGACT GCTCTTTGGC CGGATTGCAG ATTATGTGCC
121051 TGGTGTGAAG AAGGTTTATC TACAGGTACT TTTTTACACC TTTTTTCCCC
121101 TATCAAAAAT TACTCTCATC ACCCAATGTC TCATTAAATG TACTTACATG
121151 CTTAAATTCT TTTTTTTTCT TTCCTTTTTC TTTTTGAGAT GGAGTTTCGC
121201 TCTTATTGCC CAGGCTGGAG TGCAATGGCA CGATCTCAGC TCTCCGCAAC
121251 CTCCACCTCC CGGGTTCAAG GGATTCTCCT GCCTTAGCCT CCCAGGTAGC
121301 TGGGATTACA GGCGTGTGCC ACCACACCAG GCTAATTTTT GTATTTTTTT
121351 AGTAGAGATG GGGTTTCTCC ATGTTGGTCA GGCTGGTCTT GAACTCCTGA
121401 CCTCAGGTGA TCTGCCCGCC TCGGCCTCCC AAAGTGGCTT AAATTCTTCT
121451 ATAAAAATGA GAAATATTTT CTACAACATA ACTTCTATAG GCAGTTTTTC
121501 AAGGACAAAA TTAGTTATTA GTTTGGGTTT TAAACATGAG AAATTGGCAA
121551 TGAAACAACA ATTTCTTTGT TTTGTCGTGG AACTCCACCA AACCAGAATG
121601 GTTTTCATCC ATTGCTTTTT CTATGAAGAA TGTTTTTTGG TGTAGTTCTC
121651 ATAGTCATGT GCAGATCCTG TGCCCTTTGC ATGTCTTATG AAATTTGGTT
121701 GTGTGTGTGA CTTTTCAGCT TCTTTACTGC AAATTGCCTC CTCGTGTTTT
121751 GGGGTGAGCA TAAACAAATG CTAATTCCAA GATCATTGCT GACAATCAAC
121801 AGAACAGGTA TTGAAGTGAC TCCTTCATGC CACACACTCT GCTAAATGCT
121851 GAAGACTTAA GTGAAACATG GTCTGTGCCC TCACCTAGTA GCTAATGGTC
121901 TCATGGGAGA AGATAAAGCA GTGTTGCAGC ACAGTGGAAT AACGGGTTTG
121951 CTAGATGAGT GCCATAGCAA CACAGGCACC ATGCATCTGA GTCACTAGTG
122001 AAGGGCTGAG CAGAGTTAAG AGGTGAGGAC CAAGTGTGTA GATAAGGGAG
122051 ACAGAGAAGC ATGCTCCGAG CAGAGACAAA CACATGGGAA ACACCTCCCA
122101 CACTGTGGAG GTGTGACATG GGATGTTATA TCTGGGAAAC AAATGTTTGA
122151 ATGGAATAAA GGGAGAATAG TGGATGGATT GGTTGGGGGG ATGGACAGGA
122201 AGCAGCTTGG GAAGGGCGGT TATGTACATG AGCTCTATCC TGCAATCTAC
122251 TAGGAGCTAT TAAAGGATTT TAAGCCCAGG AGTGACATAA ATTGGGGTGG
122301 CGGGGGTTGG TGTTTTTTGG TTTTTTGAGG CAAGGTGTCA CTCCGTTTCC
122351 CAGGCTGGAG TACAGTGGTG CCATCACAGC TCACTGCAGC CTCAACATCC
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FIGURE 3-36

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122401 CGGGCTCAAG CAATCCTCCC ACCTCAAACT CCTGAGTAGA TGGGACTACA
122451 GGTGCGTGCC ACCATGCCTG GCTAATTTTT GTTTTTTTGT TTTTTTTCTG
122501 TAGTAACAGG GTTTCGCTGT GTTGCCCAGG CTGGTCTCGA ACTCCTGGAC
122551 TCCAACGATC CACCCATTTC AGCCTCCCAA AGTGCTGGGT TTACAGGTGT
122601 GAGCCATGCC CAGCCTGAGT TGTGTTTTAT AAAGATCAAT TTCGGCTGTG
122651 CGTGGTGGCT CATGCCTGTA ATCCCAGCAC TTTGGGAGGC TGAGGCAGGT
122701 AGATCACCTG AGGCCAAGAG TTTGAGATTA GACATGGTGA AACCCCGTCT
122751 CTACTAAAAA TACAAAAATT ATCCAGGCAT GGTGGCACAT TCCTGTAATC
122801 CCAGCTACTC AGCAGGCTGA AGCAGGAGAA TCACTTGAAC CTGAGAGGCA
122851 GAGGTTACAG TGAGCTGAGA TTGTGCCACT GCACTCCAGC CTGGGTGACA
122901 GAGCAAGACT CCATCTCAGA GAAAAAAAAA AAATCAATCT GGTAACTGTG
122951 AAGAGTGGAA TGGAGTGGAG GAGGGGACAA GAGTTGAGAT AGTCACAAAA
123001 GGCCACATAC TGAATGATTC CATTTATATG AAGTGTCCAG AATAGGAATC
123051 TCTGTCTCTT TCCATAGAGA AAGAAGGTAG ATTTGTGGTT GTAGGGGCTA
123101 GGGAAAGGAG GGAATGGGGA GTAACTGCTA CTGTGTTTCT TTGTGGGGTA
123151 ATGAAAATGT TATAAAATTA GATAGTGATG AAACTCACTG AATTGTGCAC
123201 TTTAAGTGGG TGAATTTCAT AGAATATGAA TTATATCTCA ATAAAGCTAT
123251 TTTTAAAAAG GCCAGGCATG GCAGCTCATG CCCATAATAT CAACACTTTA
123301 GGAGGCTGAA GCAGGAGGAT CACTTGAGGC CAGTTCGAGA CAATCCTGGA
123351 ACCATAGTGA GACCTCATCT CTACCAAAAA AAAAAAATTT TTTTAAGTTA
123401 GCCAGGCACG GTGGCACATG CCTATAGTCT TAGCTATGCA GGAGGCTGAG
123451 GTGGGAGGAC TTTGAGCCTA GGACTTTGAG ATTACAGGGG AGTATGGTCA
123501 TGCCACTGTA CTCCAGCCTA GGTGACAGAG TGACACCATG TCTCTAAAAT
123551 TTAGAGAAAA AGAGTAGAGG TCCAGGGACT AGTTGGAAAC TATATTAAAG
123601 TAGTCTAGGC ATCTAGGCAG GAAGAACCAA GGCAGAGATA CTGAGATCAA
123651 ATGGAATAAG CTAGGGACAT AGAGAATGAG AATTTGATGA AGCCACTTAG
123701 GCTGGATCTG AGATTTGTGG CTCAGGTAAT GGAGTAGATG ATTTTGCCAT
123751 CTTATCAAGA TCAATATGCA GTAGATCTAA GTATGATGAT GAATTGGGGT
123801 TTTTTAAATT AAAAAAAAAT TTTCACCCAA CCTACCTGCC CTTGCCCCAG
123851 TGATGAGTTT GTTTTTGCCA TGTTGTTTGT GATGCCTGTA GGAAAGCCAA
123901 GTAGTGTTTA GAGCTCATGG AAGAGTCTGG ATAAGAGGCC TGTGGGTTAA
123951 GAGGCCTGTG GGTTAGGAAG CCTGTGGGTT TGGCATTCAT GGGCTGCATG
124001 AAGTAAGTGG AGGACTAAGG AGATGGAAAG GGAGTGGCCA GATAGGCAGG
124051 GGGAAAACAG GGATGAGAGT GTTTCTAGGG GCAGGAGTGG TCAGCAGTGT
124101 CAGTAGCTAG TGACAAAGAG GCTGAAAGGT TTTCATTGAA TTTAGAATAG
124151 GGAGGCTATG AGTGAGCTTA CAGAGAATGG TTTCTACAGG TGCAGAAAAT
124201 TGATCATGAT CATTTGAACA AATGGAAATA TAGACAACTT TGTCCAAATG
124251 CTTGGCTGTG GAAGGAAGGT AAAGGCAAGC CACAAGGGGG GGTCTTAGGT
124301 TTTGAGGATT AAGCCTGTCT AATTATATTA TACATGAGAG GCAGTATTTG
124351 AGCAGGGCCT TGAAAAGAG GTGAAATTTG GACACAGGAA AATGATTGGA
124401 AAAGGCATTA CAGATAAAGT TAACTTCCAT TAATTGACTT GAAGTAATAA
124451 CAGTCAACCA TTTATTGAGG ACTTTCATGT GCCAGACAAT GAACTAAGGG
124501 CTCTACATGC ATTATCTCAT TGATCCTTGC CCCAGCCCTT TAAGAGAGAA
124551 GGTACCATTG TTATTTCCAC TTAGAGATGT GAACACTGAG GAACTGAGAG
124601 GCTACCTCAC TGTGGGTGTC TGTGTGTATA GAGGTCCAGG CAGTCACAGG
124651 ACAGTCTGGT CACACAGCTA GAAGGAAGTG AAGAGAGTTG GTAATGTGCT
124701 GCTTTTAAAA ATGTATTTAT TGTATCATGA TCACTTTGTC AGTACTTCAC
124751 TGTGGACATC CTCATCTAAC ATTTAGTTTT GTTCTCTAGT GTCAAGGGAG
124801 CCCTCTAATG GACATTTATT GCACTACAGA CTTTCAGCTT TCATACATTC
124851 AAAAATTGAG TGCCTCCTGT GCCCCAAGCA CCAGCTCAGA TGCTGTTAGG
124901 GTGATGCAAA CAAGACAGAC ATGGTCCCTG AGTTCCTAAA GCAAGCCTGA
124951 GGCAGGAAGA AGCCGAATGT GTGTGGAAAC CCAAGAAGAT GGGGAAAGTG
125001 GCATGGGAAG GGACTGGAAA GTTAGAGTGG GTCAGGATTAG ACAGAGCCTT
125051 GAAAGCCAGG ATGAAGAGAC TTTGCTTTAA GAGTAGTGGA TTTTGGCCGG
125101 GCGCAGTGGT TCACGCCTGT AACCCCAGCA CTTTGAGAGG CCAAGGCTGG
125151 CGGATCACGA GGTCAGGAGA TCGAAACACA GTGAAACCCC ATCTCTACTA
125201 TAATTACAAA AAATTAGCCA GGCTTGGTGG CACGCGTCTG TAGTCCCAGC
125251 TACTGGGGAG GCTGAGGCAG GAGAGTCGCT TGAATCTGGG AGGCAGAGGT
125301 TGCAGTGAGC CGAGATCGCA CTACTGCACT CCAGCCTGGG TGACAGAGTG
125351 AGACTCCGTC TCAAAAAAAA AAAAAAAGT AGTGGACCTT TGTTGGAGGA
125401 CGTAGGTCTG ATTTTGTTTT TAAAGTCACT GTGGTTGTTC TGTGTTTGGA
125451 GGATGGATTA CAGGGAGGGA AACAAGAGTG CAAGAGGGGA GGAAGACCTG
125501 TTAGGAGATC AATTCAGGGT CCAGGTGAGA GATGATGGAC TATGGTGCTG
125551 TAATAGATAA AGTCATGATA TATTTTATAT ATCAGCATTT TATTCCAAAA
125601 CAATGTTTGA ACGTCCTCCT ACCCTAGATA GGGCAGACAG ATTATCTGCA
125651 ACATTTTTGG AGCACATTTT AATACCTGAC TGTTTCCAGT AATTTACAAA
125701 AGAAAATATA GCCTTTCCTA ACTTGTCCCA TGTTGGTCTG CAGTTACACA
125751 GCAGTAAGTT AAAAGTTAGT ATTGGGGGTC AAATATTTCA CTTTAGATGA
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FIGURE 3-37

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125801 AAGTTTAGCC ACAATCTGGC TTCTGTTAGG CCTTATCTAA TTTTTGCATC
125851 CAAATGTAGA GCATCGTTTG TGGCACCCAG TAGCACATGC TGAGTCACAG
125901 GTGTGACAGC TGCATTTCAA ACAAGCCTGA GAAGGAGAAA GAAAGCCCTT
125951 CAGTGTGTCC TGTGGTTGCG AGGAGCCACT CACGGACTCC ACCTTGTGAA
126001 CACAGCGGCA CAGGACGCAA CACAGGCCTA ACCCATGCAG GATGCTGGAC
126051 TCGTTCCCTT ATTCACTACC TCCTCTCTCT CCTTTTTCAT GGCTTCCTTG
126101 CCCCAACATC CCAAACACAC AGTGTGGTTT TTGATTCTTG GCTCTTCTCT
126151 GCTGCAGTTG ACTCCAGCTC TGCCTGTTTG TTCCTTCCTT TTTCTCCATC
126201 CCTGGCTCTC TGCCTTTTGG CCCATCCTTT AAGGCTTGGA ATGCTCCTGG
126251 GCTTACCTTC TTTCCATTCA TTGGTGGTGT GTTTTCTCAG ACATACCTGC
126301 TCCCTGCTTT CATCTTTCAA CTTCTTGGGG CTGTGACAAC TCTTCCCTCT
126351 TTGTCCCCTG GAAGCCAGTT CTGAGTAGCA GCCAGGCCTA GAACACTGGT
126401 GACACAGACA CACTTCATAG CCCTCCCGCA TGGTCTAGTT TCAGATCATG
126451 GTAATCCCTA GTCTAGGAGG CTGCCGAGCC CAAGAGCACA GGCTCTGGAG
126501 TGAGAAGCCA GTTCACCCCA GTTCTACCAC CAACTTGAGA ATCAGCAGAG
126551 GGCTGTGGTG AGGATTCTTG GTGGCAGGTT ATGTAAAGTG CCTAGCCCAG
126601 ACTGGATGAT TAATAAATCC TTGCATCTGT TATGTTTTAA TATCTTATTA
126651 AATACTGAAA GCAGATCCTG ATTTGGAATA GGTCTCAAGA AAGGAGACTA
126701 GGGTCTAATC CTGAATTAGA GTCTTTGCTT ATAGGTAACA AAGAATTTAT
126751 GAATTTATCT CACATTTTTG CTTAAGAGTT CTGAATTTAA ACTTCCATCA
126801 AGGTCCTGGG TCCCAGGTGT TTTCAACCTA ATAATTCTAA ATATTGAGTG
126851 GTTGGTTGCA GTAGCTTATG CCTATAATCC CAGCGCTTTG GGAGGCCAAG
126901 GCAGAAGGAT CCCTTGACCC CAGGAATGCA AGACCAGCCT GGGCAACATA
126951 GTGAGACCTC ATCTCTACAA AAAATTAAAA AGTTAGCTGG ACATGGTGGC
127001 CTACACCTGT AGTCCCAGCT ACTTGGGAGA TTGAGATGGG AAGATTGCTT
127051 GAGCTGGGGA GGTTGAGGCT GCAGTGAGCT GTGATCATGC CACTGCATAC
127101 CAGTCCTGGGT GGCAGAGTAA GACTTTGTCT CAAAAAAATA AAAAAATAAA
127151 AAAAAATGCT GAGTCAAGTC TACTGCTCCT GCCAGAAGAG ATGACTGAAG
127201 TGCATTACGT AGAATAATAA TGGTTAAAGA AAAGCTTTGC AAAAGTTCCC
127251 AGAATATATA CTTTATTGGG ACAGGAGAAG CTACGTGTGT CGTGGTATCT
127301 TTTTACTATT TTCTTAATCT TATAGGCCTG TGTTTCTAGT CACCCATTAAA
127351 TTACTACAGA TTTGTGTTTT TAATGTAATA TATAAGTGTT TTGGAAGGGT
127401 GAGAATATTT CAAAGGTTTG AAAGTTAAAA CTGTGTATGA AAGAATTGAA
127451 AACTTGGAAT TTAGATCACT TTTCCATTGT GTCATATTTC TCTGTGACAT
127501 GGACATATTG AAGCATGGAC ATCATGTCCA TGCACATAAA GCAGACAACC
127551 CAGACAACAC ACACATGTGC ACAGGAACGC TCTGGAAGGA TGCAAACCGA
127601 ACTGTTAAGT GTTGATTCCT GAGGAGGTGA ATGGGCATGG GTTGAGAGTG
127651 AGAAGAGGTT GTAGGAAGAC TTTCATATAT TACTGTGTAC ATTTCTCTAA
127701 GGTTTGAATT TTAAAAAATA TATTCATGAG TTACTTTTGT AATGTAGAAA
127751 TATTAATGAC TTTCCTATCC ATCAGTCTGC CTAAGCTTCC TCTTCCGGTT
127801 CAGGTAGAAT GAATTGGATC AGTGTTGCTC CATTTTCCAT TTTAGCATTT
127851 TACATTTGCC TAAAGATATC TTGGGATGAG GGTATATACT TTATCAAATG
127901 TAAGCTATTT CCAAAGTAGT AAATCCAAAT ACTTAACAAC TTCCCAGCCT
127951 AAGTAAATGA TCAGAGGCTC CGTACTCAGT CTCATCTAGA CTGTGGCACT
128001 GGGTGTGAAC GTATCAAATG CATGTTTCTC CATCAGGCAG AAGTGAGAGT
128051 AACCATGTGC CATGGAGAAG GTTGACAGAC TCCCTGTGAA GCACTTCGAA
128101 GTGACACTGG CCTCTGTGTG CTTCAGAAGA ATCCAGCCAC CTGCTGTGTG
128151 GCCTGACATT TTCCTTTAGT TTGTGATGGG CCAGCAGAAC TCTGTTGCCA
128201 ACTGTTTTCT GTCCTGGGTG CCTAGCCAGA GGTTCTGAAA GTCTGGAGAC
128251 TTTATATTGG CTAAACTTTA GGAACGTCAA TTACATGTCT ATCTCCAAGA
128301 TGCCTTCTTT TATTCAGGTG CAGCTCATTG TTTCCTCTTG AGCTACACTT
128351 AAGATTCTTG AGCAAAACCT AAACTGACAT TTCTCCAGCA ATGCTCTCCT
128401 TGAGATAGAA ATGGGAAAAG TAAGAGCAAA AGGAATCTTT TGTTCTCATG
128451 TGCATACACT AACTCATAGA AGGTTAATAC TTCTATAGCC TGTACTATTA
128501 TAACAAGTAT TATATATTTA TGATATATTT CCTTAAAGAA AACAAAAGCA
128551 ATATAGACAT CTAAACTGTC ACTGGCTTAT TAAGTGTCAG TGCCAGAGCC
128601 TAGGAGAAAA TAAGGAGCCT GTGAATTCCT TACTCGAATC TAACCAGAGC
128651 TGCTGTGTTT GAGAGCAAGT TTTAAAAGAT TGTATGTAAT ACTAAGTTTA
128701 TTCATCTTTC ACACTGAGTC CCAGCATCAC CAGATCAGTA TTTGATGCCT
128751 GGATCAATCT TTATTCTGGG GAGTGATGAA GCATTGAACC TGCTATATGT
128801 ATAGTTTGCC GAGCGTCGGC ATGTGCTCCT TGTGGCCCAG GCATCCCTGC
128851 ATATAAGGAA TAGGTACGTT CTCACGAGCC TCACCTACTT ACCTCCACAT
128901 TTAGCCAGAT TCTGGGTATT AACATCTGCT GGGAAAGAGC ATCACTACAG
128951 TAGCTACAAA TAAGGTGGAA GAAGCAAAGT ATTTTTCTGA GAAGTACTTA
129001 AAGAATAGAT GTGTAAATTT CTATAAACAC AAGTCTTAAA GGAAAATGAA
129051 AAAATTTTAC ATTTAAATAA CTACATAAAT CATTGCCTAA TTTTAATAAG
129101 AATATAACTT AATATAGCTT GAATGGAGAA AAGGACAACT TGCAGTCAGG
129151 GAAAGTATTA AGAAATAATA TGCTCAGTCT GGGCGCGGTG GCTCATGCCT
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FIGURE 3-38

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129201 GTAATCCCAG CACTTTGGGA GGCCGAGGCA GGCAGATCAC GAGGTCAAGA
129251 GATCAAGACC ATCCTGGCTA ACACAGTGAA GCCCCATCTC TACTAAAAAT
129301 ACAAAAAAGT AGCCAGGCGT GGTAGTGGGC GCCTATAGTC CCAGCTACTC
129351 GGGAGGCTGA GGCAGGAAAA TGTTGTGAAC CTGGGAGGCA GATCTTGCAG
129401 TGAGTCGAGA TCGCGCCACT GCACTCCAGC CTGGGTGACA GAGCAAGACT
129451 CCATCTCAAA AAAATAAAAA AAATAAAAAA AAGAAATATT ATGCTCAAAA
129501 TATATAGCAA TAAGTTGGAA ACTTTTACTT GAATAATTTT TACAAAACTG
129551 ACCAAAGAAC AAAAACGTGA AGAGGCCAAG TTCCAAGACT CATGTTATGT
129601 AAATTGTTCT AAAACAACAT TAGCACTTAA CAAAGTTGAA AAGTTAACAA
129651 AGCCAAGTAC TGTACTAGGC TTCCAACACT AACTAAGTAT AAAATTCCAC
129701 AGAGCTGGTT TTCTTATCTT TAAAGAAATT TGTTGGCAAG TGGTACTGGT
129751 GTTAAAAAAA AAAAAAAAAA AGGAAATATG TACTGACCAA AATAGAAAAA
129801 AAATATGAAG CACATTAAAA GAAAAAAATA TATATTCCTG AAAACCTTGT
129851 ATAATTACAG TGGCATGGTT GGGAATGTTT GGTCTATAGT TTTAACAATT
129901 AAATCCATTG AATCTGGCCC CGTACCATCC TAAAGTTTTA TTCTAGATTC
129951 TCTGGAGTTT GTGATTATAG ATATGTTTCT AAGATTTAAG TAACTTTCCA
130001 TGTTTATCTC CTTTTATTGTT TGTACATAGA ATAAAAATGT TTCTATTGTT
130051 AAGAATATTA GAGTTGGACG CAGTGGCTCA CGCCTATAAT CCCAGCACTT
130101 TGGGAGGCCA AAGCAAGTAG TTTGTTTGAG CCCGGGAGTT CAAGAATGGC
130151 CTGGGCAACA TAGTAAGACC CCATCTCTAC AAAAAATAAA AAATTAGCCG
130201 GGCATAGTGG CATGTCCCAG CTACTTGGGA GACTAAAGTG GGAGGATCAC
130251 TTTGAGCCCA GGAGGTTGAG GCTGCAGTGA GCTATGATCG CACCACTGCA
130301 TTCCAGCCTG GGCAACAAAG TGAGACCTGT TTCAAAAATA AAAAATTGGG
130351 GTTTATCTAC TTAGATTTTC AATAAAAATT ACTACTTAAA TCTTTACCTG
130401 CTTGTTAATT TCAAACCCTT TTCTACATTT TGATTTATCT TTAAATCTCT
130451 TTTTGTCTCA ATAAATGGGA AGTATCAGGA AGTCTTTTTA CTTGCTCAAG
130501 GTCATAGAGA GCTTAGAACC TGGTAGTGTC CCTCTGAGCC CCAGTTCTTT
130551 CCAACCTGCC AGGCTGTAGG CCCAACAATT ACTCACCACT AAGAAATTAT
130601 GCTTGTGCTG TCATGGCAGT TGCATTGGAG AAAAGGATAT TTAACTGGCA
130651 AACAAAAGTC AGGAGAATGG GGAGATTTTG TTCTTTTGAA ATGCTAGTGT
130701 GAAGTGCTAG GCTTATTTTT CAAATGCCCA ACTCGTATTC TTTTCTTTTC
130751 TTTTTTTTTT GAGAGGGAGT CTCACACTGT CGCCCAGGCT GGAGTGCAGT
130801 GGGGCGATCT CGGCTCACTG CAAGCTCCGC CTGCTGGGTT GACGCCATTC
130851 TCCTGCCTCA GCCTCCGAGT AACTGGGACT ACAGGCGCCC ACCACCACGC
130901 CCGGCTAACT TTTTTTTTTT TTTTTGTATT TTTAGTAGAG ACGGGGTTTC
130951 ACCGTGTTAG CCAGGATGAT CTTGATCTCC TGACCTGGTG ATCCGCCCTC
131001 CTCAGCCTCC CAAACTGCTG GGATTACAGG CGTGAGCCAC CGCGCCCAGC
131051 CGGCCAACTC GTATTCCTAA ACGAATCATA ATTTTACCAT AAGACCATAG
131101 TTTAGTGATT GAAGAAAAAA TGTACCGAAC TGTATGATAT GATGGTGTCA
131151 AAAAGAACTA ACCCAATATG AAACAGTTTT CAGGAGCATG TTTCCTATTT
131201 TGGTGTCAGT GGACCACTTG TGTTAAAGTT GTGAAAACCA ACACTCCTGA
131251 ATTCCACCCA GAACTCACAC TCTGCACCTT CAGAGGCCCT CAGATTGTGA
131301 GTGGCTGCCC CGAGGTGTAC TACCAACCTC CAGCTTCCGT AGGTCCGTAG
131351 GTGTGCTAGT AGGGCCTAGG AAAAACAGAA CAGATGAGGA CAGTGATGCA
131401 TACAGCTGCT TTATCTGGTC TCTCCTTCCT CCCTAGCCTG ACTGCTATTG
131451 GAGGGCACCC TCCAGGCACA GTTCTGTTCA CAGCCTGCTG CTGCCCCCGT
131501 GGGCCATGGT TCCAGGACGG CTCCATCTTC TGTGCTTTGG GCACATTAAC
131551 CTCTCCCAGC GTCACTATCT TCATCAGCAA AATGGAGATA ACATTAGTAC
131601 CACCTCATAA AGTTGTTATG AGGATCACCA GTGAGATAAT CAATCTAAAG
131651 TGCTTACAAC AATGCTTGGC ACTTGGTAAA CACTAAATAA ATGATAGTTG
131701 CTATTATATG CATACTTTTA AAAAACCTGA TGCTTTTAAA AATTTTTTCT
131751 GCTGACTAGT GAATTGTTCA GTTTTTGTTG TTGTTGTTGT TGTTGTTGTT
131801 GTTTGAGACG GAGTCTCGCT CTGTCGCCCA GGCTGGAGTG CAGTGGCATG
131851 ATCTCGGCTC ACTGCAAGCT CCACCCCCCG GATTCACGCC ATTCTCCTGC
131901 CTTAGCCTCC CGAGTAGCTG GGATTACAGG CGCCGGCCAC CACGCCCGGC
131951 TAATTTTTTT GTATTTTTAG TAAAGACGGG GTTTCACCTT GTTAGCCAGG
132001 ATGGTCTCGA TCTCCCGACC TCATGATCTG CCCACCTCGG CCTCCCAAAG
132051 TGCTGGGGTT ACAGGCATGA GCCACCGTGC CCGGCCATGA ATGGTTCAGT
132101 TTTAACAGGT TCTGTGCCTT AAAAAAGTTA TTAAATTGAC TGTTTCCTCC
132151 TTTTTTGTAC CCATCATACT TTGAATATAT AACTACGGCA GCATATAAAC
132201 ACTTCACTTG CACTTATTTA TTTAAATGTC CATCTTTCCA TAACCCAAGG
132251 GTAGGAACGA AATCTTATTC ATTGTTGAAA CCTCTAGCAC ATAGCACAGT
132301 GCCTACCAAA TAGTAGGCAA AATCAGGTGT TCAATTCTAT TAACTACTCT
132351 AACACTGAAC TGAAAGTGTT CAATGGCTCA AAATAATATA ATAAGCCTTA
132401 ACTCTGGGGT GCTTAAATTT ATCTATAATC TCTGCCAGTG AAGTATACAT
132451 AGTTTTAAAG GTTAAAAAAA AATCAAGTGT TTAATGAATT TGAGCTGATT
132501 GAGCACTGAC CAGATACAGG ATCCTTAAAC TTCATAATAT CTAGTCCAAA
132551 GATGAATTTT TTTTTTGGTA CAGATTCTGA CTTCAAGGGA TTTGCAGGCT
```

FIGURE 3-39

```
132601 GGGAGGGAAA TTAAATATAT AAAAAGTCAT TTTCGGCCAG GCGCTGTGGC
132651 TCATGCCTGT AATCCCAGCA CTTTGGGAGG CCGGGCAGGT GGATCACTTG
132701 AGGTCAGGAG TTCAAGACCA GCCTGCCCAA CATGGGGAAG CCCCATCTCT
132751 ACTAAAAATA CAAAAATTAG CTGGACTTTG TGGTGCTTGC CTGTAGTCCC
132801 AGCTACTCAG GAGGCTTAGG CAGAAGAATT GCTTGAACCT GGGAAGCGGA
132851 GGTTGTAATG AGCTGAGATC ACACCACTGC ACTCCAGCCT GGGCAACAGA
132901 GACAGACTCC AGCTCAAAAA CAATACGTTT TTTTAATCTT GTCCCTTAAT
132951 GGAAATATTG AGAAAATGTC TAGGGGAACT CGAAGGAGAT GATTATAGGA
133001 GTTGATTATG TATGTAAAAT CAAAGTGAAT GAGGCAGTGG CAGGGGGGAA
133051 AGGGGGAACC AGTAATGACT TAGAAGTCCT AAGCATGTTG CATGGTAATT
133101 GTGACATTTG CTTCCTGCGA GCGGAGCTGA CCTTGTGGTG TCCGTCCTAG
133151 GTACTCTCCT TTTTCTTCAT TGGTCTGATG TCCATGATGA TTCCTCTGTG
133201 TAGCATCTTT GGGGCCCTCA TTGCTGTGTG CCTCATCATG GGTCTCTTCG
133251 ATGGATGCTT CATTTCCATT ATGGCTCCCA TAGCCTTTGA GTTAGTTGGT
133301 GCCCAGGATG TCTCCCAAGC AATTGGATTT CTGCTCGGAT TCATGTCTAT
133351 ACCCATGACT GTTGGCCCAC CCATTGCAGG TAAATATAAT GATTCTCCAG
133401 TAGTTATATT AATTCATAGT ATTTTCTACT TCAGGTCTTA ATTAAGTCTC
133451 ATTTATATGT AAAACATATT ACAGGTTATT GATTACTGGT CTTTTGCTTT
133501 TATGTGTGCC TTACTGGTAA CATTTTTAAT AAGACTAGCT ATTAAACAGT
133551 ATGTTGAATT TGCTGAAGAG TCCCTCTTAT CCTTACTGGC AGCTAAAACA
133601 CTATATAAAA CACTTTGGGA GGCTGAGGCG GGAAGATCAC CTGAGCTCAG
133651 GAGCTTGAGA CCAGCCTGGA CAACATAGTG AGACACTATC TCTACAAAAA
133701 ATAAAAAATA AAAAAATTAG CCAGGCGTGG TGGCATGCAT CTGCAGTCCC
133751 AGATGCACAG GAGGCTGAGG TGGGGGGATT GCTTGAGCCC AGAGGTCAAG
133801 GCTGCAGTGA GCTGTGATCA TACCACTGTA CCCCAGCCTA GGCGAAACCC
133851 TATCTTTAAA AAAAAAAAAA GTTGAAGATT CTGAAAGATT TCTAAATATG
133901 TCGGCTTTTG GTAAGAGATC ATACATCCCC CTGAGGAGTA GTTGATGAAA
133951 AATAACATGA TAGAAAAAAC CCAAATGCCT GTAAATAGCT AACTGGGTAA
134001 GCAAAATGTG GAATATCTAC AGTGCAATAT TATTCAGCCA TAAAAAGGAG
134051 TAAGGTACAG AACTGATGCT ACCAGGTGAA TGGACCTCAA GAACATTATG
134101 CTAAGTGAAA GAAGCCAAAC ATAAAAGGTG ACGTGGCTGG GCATGGTGGC
134151 TCACACCTGT AATCCCAGCA CTTTGAGAGG CCAAGGCAGG AGAATCATTT
134201 GAGCTCAGGA GTTCCAGACT AGCTTGGGTA ACATAGCAAG ACCTTGTCTC
134251 TACTAAAAAT AAAAAAAATT AGCCTGGCAT GGTGACACAT ACTAATATTA
134301 GTGTAGTCCC ACCTACTCCA GAGGCGGAGG CGAGAGGATC TATTGCGCCT
134351 GGGAGATCAA GGCTGCAGAG CCGTGATAGC ACCACTGCAC TCCAGCCTGG
134401 GTGACAGAGT GAGACCCTGT CTCAAAATAA AAGGTCATAT ATCGTATGAT
134451 TTATTTCATG TGAAATATCC AAAATAGGTA AATTCATACA GATAGAAAAC
134501 TGGTGACTGC CAGGGGCTGG AGAGAAAGGG ATTGGGAAGT AACTACTTAA
134551 TTGGAATGAA GTGTCCTTTT GGCATGATGA AAATATTTTG GAACTAAATA
134601 GAAGCAGTGG GTGCAAAACA TTGTGTATGT GCTAAATGCC ACTGAATTGT
134651 TCACTTTCAA ATGGTTAATT CTATTTCATG TGAATTCCAC CTCTAGAAAT
134701 TCTCTGAATG ATATTATAAA GATGTCCTAT GTTCAGTATT ACTTGGGTGC
134751 CTGTGTCAAT TAGTATTAGA AGATTCAGTA TAAATATGAT AAAATTTAAA
134801 TGTGTGTACT GTCATCTGTG TTTGGCACAT GAGGTGCTCA GTGAAGGTTT
134851 AGCTCAATTC ATTCTTCATAC CCTGAACTGT ATTCCTAGTC ATGAATCAAG
134901 CAAGCAGAGT TACTACTGAG CAGACCAAAT CCAGTTTAAG TTCAAAAGGT
134951 CATGGTCTCC TTATAGGAGA ACCCTCCATT CCTTCTTCTC TCCCGCAGGT
135001 AATATAGTAT TCACTCTTCT TTCTATAGCC TACAAGCTTA GTTTTTATAGT
135051 TTCTAAGTCC ACAGCAGATT TTATATAAGC AGCACTCTAG TAGTAAATAG
135101 TTTTGCTACC AGAAGTGACA GTTAACAGAG CAAGAATAAG GGAGGTAACA
135151 GGAAACTTCT AAAGCAGGCA GAACACCACC ACACAGCAAC TGGCAGCAGA
135201 AAGCTGCTGG CTCACCAGGA GGCTCTGAGG GCATCATAGT ATTACAGCAG
135251 AACATAATCA TGAGTGTTCA TAAGGAGGAA GAGTTCAGGA ATGGTCTGAT
135301 TCCAAAGATA GAAAACTTGT GCATTTACAG ATATTGTCTA TTTTATATAT
135351 GCAGAATGGA TGTACACATT TTTATGTGTT GGTACTTAAT TGGACAAATG
135401 GTCAGCTATT TATTTAACAA TGTCAGATAG ATATTTAGTA CAGTATATTC
135451 CCTGGACATT TTAGATAACT TAGGTTTTAT AGTATAAGTT ATAAGAGTTT
135501 AAAAACACTA AGATAACTTT TAAAACCATG AGTCCTGGAA TTTGTTAGAG
135551 AAATTAGAAA TGTTGAGTAC CGTAAAAGTT TTCAGAAGCA GAACCCGAAT
135601 ATAGAATGCC ATTAATAATT CTTATATACT TACATTTTCT TCCAGGTACT
135651 TATAAACCTT AGTCTATTTC CAAAATGTAT TTAACAACCT AACTTTCATC
135701 CAAATTATTA AATTTAAAAT TTTTCTTAAT TTTGAATTAT GATGTTAAAT
135751 AGTTTTCATG TTATTTCATA AAAAACAAAT ACACCAAAGA GTAGTTTGAA
135801 AGCTGGGCAT GGTGGCTCAT GCCTGTAATC TCAGCATTTT GGGAGGCTGA
135851 GGTGGGAGGA TTGCTTTAGC CTAGGAGCTT GAGACCAGCC TGGGTAATGT
135901 GACAAACCC CATCTCTACA AAAAATATAA AAATTAGCCA GGCATGGTAG
135951 CATGCACCTG TAGTCCCAGC TACTCAAGAG GCTGAGCTGG GAGGATCAAT
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FIGURE 3-40

```
136001 TGAGCTTGGG AAGTCAAGGC CTGCATGAGC CATGATTATG CTACCGCACT
136051 CCAGCCTGGG TGACACAGTG AGACCCTGTC TCAAAAAAAA AAAAACGTCT
136101 ACCTTTCTAT CTTTTCAAGT AATGTCTTGG TATGAAAATC CAGAGGACTG
136151 TACTTTATGA CAACGTTAAA GATATGAGAT CTTTTTCTTC CTATCAAAAA
136201 AGGTTTATAT TTCAGATCTG TTTCCTAAAA AAAAAAAAAA GTCTGATGTC
136251 TGAGATGTCT GAATCAGTCC TGTGGCTGAT CTAGACCCCC TACAGAGCCA
136301 CACTTGTTCT CCCTTGGTGA CAGCTTTTTC CCTTGTCAGG GTTACTTCGT
136351 GACAAACTGG GCTCCTATGA TGTGGCATTC TACCTCGCTG GAGTCCCTCC
136401 CCTTATTGGA GGTGCTGTGC TTTGTTTTAT CCCGTGGATC CATAGTAAGA
136451 AGCAAAGAGA GATCAGTAAA ACCACTGGAA AAGAAAAGAT GGAGAAAATG
136501 TTGGAAAACC AGAACTCTCT GCTGTCAAGT TCATCTGGAA TGTTCAAGAA
136551 AGAATCTGAC TCTATTATTT AATATCTTAC ATACCTCCAC CAGACTGGAC
136601 TTGCTTTTTG AATTTTAAGC AAGTTTCCTT TCCTTTTATA CAAATTGCAA
136651 ATTTCATATT TTTTTAATCA CATCCTAGGA ATAGCACAAT AATTGGGAAA
136701 TAGAACCCTT ATCACTAGAA GAACCATTTT CTGCCACTAA ATATCTCTGA
136751 TGTTTCCATG AGTCTGAGGG CAGAGACTCT GGTATATGAA AACATGTCTG
136801 AAAGTCACAT ATTGTGAAAA TTTGAAGCTA TCTCAGTAAA AAGCAGCTTT
136851 GGAAACTGTG AATGATCTTT AGCTTGTACA AATGTTTAAA AATACCTCAG
136901 GCTATACTGA AAGGGTTGCA GTTTGGTTAG GAGTGGAAAT ATTTTGTTTG
136951 TTAATGATGT CTTCAGTTCT GGTACCTCTG TTTTACTTTC TTATGCTCTT
137001 TGGAAACTTT TTGCAAAATT TAAGCCTGGG TTCTAGATAA TACCAGATCT
137051 ACCTAAACCT CAAGTCTATG TTAAAGTTGC TTTCCTGCTG TTAAATAAGC
137101 TATGATATTA AGATATTCTG ACTTGCTCCA GTGTCAAGGG ACCTTCTGGG
137151 AGCAGGTGCT AACATAGTGT TCAGAATCAA TATGTGAGAT GAAAAGGATC
137201 CCCTCCAGGA GGATCCTGAG CTGTTCAGAA ATCATTTAAG TTTACAGCGT
137251 TGTTCCCTTT GCGTTTGCAG TGCGTTTTAC TCAAGTAGCC AGAAACACCC
137301 CACGTTTCTG AATTTGTTTA AACTGTAACA ATAAAGTAAA ATAGAATGCA
137351 TGAAAGATAT TCTGGCGATT GTAACTTAGA ATTTTTCTGA CTTCTGGATT
137401 TGTTGGCACT AGAACCTGAT ATTTAAACAA AGTCTTACTG AGCAGCTATC
137451 AAGTGGCAGT TACAGGCACA AATTGGTGGA GGCTGGAGGA TGGGGAGGGG
137501 AGCAAAACCC TTTATATTTG TGAAGAAAAT ATCTGTAGCT GATAGAAATA
137551 ATTGCTTAAA TTGGTTTATG AAATTAATGA GTCTGAAAAG GTTAAAAGCA
137601 CTTATAAAAA GAACCAAGTC CTACATTTCC AGAACTTTCT GGCAAAAATT
137651 TGCACTCATA TTATTTATCC TATGAACATT CCCATTGTTT TTTTTTGCTA
137701 TTTATATACA GATTATCATA AGAAAGCTCT CAGTTTGAGG ACCCAAAATA
137751 AAACCAAAGT CATGCCATGA CCCATACTCA TTTACAAAAA CAAGAACACT
137801 TTCCTCTATC CCTAAAATTA TGCTTTAGTA CTTGAGGCCT TTAAAAGTTA
137851 GTGCTTTTGA TTGTGAAGAC ATTCAGCAAC TTACTTGTC ATACATGCAG
137901 TTGCACCTTA CCACTTCTAA TAGTGTCATA TTTCATATTC AGGGGACTTA
137951 GATAATTTGC CTGTGGATGG TTCTTTTGCA GGAAAAAAAA TCTACATTTT
138001 GACCATACTA CCCTTTCATG TTCTTATTAT AAGCTTTTAG AAAATGATTT
138051 CATTCAGTCA TGTCCAGTTA TATAAAACGT TACTTTCTCA TTTTTGAGAA
138101 GTTCAACAAA ACATACTACT AAGACCAATC ATCAAACCCA CTATTATAAA
138151 TGTTAATTTT GGCTGGGTAA GGTGGCTTGC GCCTATAATC CCAGCACTTT
138201 GGGAGGCTGA GGAGGGAAGA TTGCTTGAGC CCAGGAGTTT GAGACCAGCC
138251 TGGGCAACAT AGCAAGATCC TGTCTCTACT AAAAATAAAA AAAAAAATTA
138301 GGCCAAGCAT AGTGGCTCAT GCCTGTAATC CTAGCACTTT GGTAGTCCAA
138351 GGCAGGGGGA TCACTTGAGC CCAGAAGTTC AAGACCAGCT TGGGTAACAT
138401 AATGAGACCC TGTGTCTACA AAAAATTTAA AAATTAGCCA GGCATGATGG
138451 TGCCCACCTG TAGCCCCAGC TACTCAGAGG CTGAGGTAGT GGAAGGATTG
138501 CTTGAGCCTA AGAGATGGAG GCTGCAGTGA GCTATGCCAC TGTACTCTAG
138551 CCTGTTCAAC TGAGCAGAAC CCTGTCTGTA AAAGAAAATC AAAAACAAAA
138601 AATAAATGTT AAATTTTGTT TTAAGTTTTA GCACAGACTC CCCTCAAAAC
138651 ACCTTCTCCC CAATTTTACA GAAAGTAATT CAAAAATGAA AACTTTACTC
138701 TGTAAAGACC TCTACAGTGT TTTTCTTTTC AAAATTTGGC TGATTTTAGG
138751 AAAAAAGTGA TCATCTGAAA CTAAAAGAAA TTGCTTGGTT AGTTTCCATA
138801 TTAAAACAGC AGTGACAAGT ATATATAACT TAGATCTCAG CATATGTGTT
138851 TGTATATTAA ACTTCACATA TGTAGTTTTC AGTTTAATGG AATGAATCAA
138901 ACTGGATCTA TAACACTGAA AAAGTTCTAT TGTAATAGAC TCATACGGAG
138951 AATACTCTGC TATAATAATA TAAAATTAAG AAGAAAAGT ATAAACGTAA
139001 GATGCTAAAT TCCATAAATG CATATTTAGT ACTATGTTTT TTGTGGGAAA
139051 AGTTCTAAAA GTTTAAAATG CACAAAGAAA ATGAAAAATA CTAATATAAA
139101 AATTTGTGCT TTAATCTAGT CAAACTAAAT CCTTTCTAAT TTCTGAATGA
139151 AGTGTTACTG CTGCAATAAA GTGACCTGAA AAGCCTAAAT TTTTTGTGTT
139201 CAATCCAGAC ACTTTTCTGA GAGTCGTAAA AGAATACAGA GTCAGAACTC
139251 TGTTTTTATC TCCTCATCCT GTTTTTGATA AGACTCAGAA AATTCTCAAA
139301 TTCGAAAGGT TCTGGCATTT GAGGGCCAAA AAAAGCATGAA AGGGAGTAAC
139351 ATTCCTTTTT ATAGATACTC TAGATTGGAT ACTATTGTAA CAGATGGCCA
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FIGURE 3-41

```
139401 AGAAACTTCC AGAAACATTT TGGTTAAATT TTATTGCAAT GGATATTGCT
139451 GGGATCCATC CATTTAAGCA GTAATATACC ACCCAGATTA TTGATACTTT
139501 ATGCAAGATG TGTTCATCTC TTTGATCATA TTTACAATGC TTACTCCATA
139551 GCCCTGCTAC AAGACTTAAA ATT
     (SEQ ID NO: 3)
```

Feature:
Start: 2104
Exon: 2104-2446
Exon: 87054-87198
Exon: 91571-92024
Exon: 120932-121075
Exon: 133151-133379
Exon: 136340-136569
Stop: 136570

Sim4 results:

Exon: 2104-2446, (Transcript Position: 1-346)
Exon: 87054-87198, (Transcript Position: 347-491)
Exon: 91571-92024, (Transcript Position: 492-945)
Exon: 120932-121075, (Transcript Position: 946-1089)
Exon: 133151-133379, (Transcript Position: 1090-1318)
Exon: 136340-136572, (Transcript Position: 1319-1551)

SNPs:

DNA Position	Major	Minor	Domain	Protein Position	Major	Minor
352	A	G	Intron			
381	C	T	Intron			
3505	G	A	Intron			
10280	G	C T	Intron			
11107	G	A	Intron			
15750	T	C	Intron			
16004	T	A	Intron			
16871	A	G	Intron			
17163	T	C	Intron			
17966	A	G	Intron			
19392	C	G	Intron			
20113	T	C	Intron			
20434	G	A	Intron			
21243	T	G	Intron			
23009	C	T	Intron			
24699	–	T	Intron			
28058	A	T	Intron			
29600	T	C	Intron			
31455	A	G	Intron			
35653	T	C	Intron			
42700	A	G	Intron			
45516	G	A	Intron			
51789	C	T	Intron			
52042	C	T	Intron			
52139	T	C	Intron			
53089	A	C	Intron			
53117	C	A	Intron			
53434	–	T C	Intron			
55431	T	G	Intron			
55905	C	T	Intron			
60567	C	T	Intron			
60751	C	T	Intron			
60755	G	A	Intron			
63301	T	G	Intron			
64573	T	A	Intron			
76462	T	C	Intron			
77652	G	A	Intron			

FIGURE 3-42

77819	G	A C T	Intron			
79594	T	C	Intron			
84331	A	T	Intron			
86107	C	T	Intron			
86175	A	-	Intron			
87109	C	T	Exon, coding	133	V	V
89444	A	T	Intron			
90535	G	A T C	Intron			
91163	T	A	Intron			
93488	A	-	Intron			
96065	T	C	Intron			
96351	C	T G A	Intron			
96701	T	C A	Intron			
96879	T	-	Intron			
97648	G	T	Intron			
97814	A	G	Intron			
98430	C	T	Intron			
101268	A	G	Intron			
103881	A	G	Intron			
103926	C	T	Intron			
107845	C	T	Intron			
109010	-	T	Intron			
109623	G	A C T	Intron			
110188	A	T C G	Intron			
111006	C	T A	Intron			
111223	A	G	Intron			
111457	T	C	Intron			
112168	T	C	Intron			
112653	G	-	Intron			
114155	-	A T	Intron			
114181	-	T	Intron			
114183	A	T	Intron			
115964	A	C	Intron			
118100	-	A G	Intron			
119631	A	G	Intron			
120833	T	C	Intron			
121125	A	G	Intron			
121245	C	T	Intron			
121521	G	A	Intron			
124296	C	T	Intron			
124549	G	A	Intron			
124858	G	T	Intron			
125920	A	T	Intron			
126266	A	G	Intron			
128258	G	T	Intron			
130303	C	A	Intron			
130617	C	A	Intron			
130910	-	T	Intron			
131727	C	T	Intron			
132895	G	A	Intron			
133506	G	A	Intron			
135473	G	A	Intron			
136201	A	G	Intron			
137080	A	C	Intron			
138022	T	C	Intron			
138543	A	T	Intron			
138681	C	T G A	Intron			

Context:

DNA
Position

352   GATGGTTAGCCAGGGATTATGGGTTTTGGCAGGAAGACCACAGAGGTAAAGTACCATTTT
         CATCACATCATATCGGGGATACATTATCATCTAGTTGAGGTACTGTGTGCCATTTTTTGC
         ACCCTAAAGTTATTTCTTCCCCCCCACTCCCCCTTTCCATCCTATACTCTTTGGAAGAAAG
         TTACTACGCATACCCACACTTAAAGAGTAAACCATTGTACTTCACCTCCATGAGGGAGGG

FIGURE 3-43

AGTATGTTCATAAAGTATTTACATTTCCTGCAGGAGAGATTTGTCTATTCTCTCCTCATT
[A,G]
TTTATTTAATCATTTACTTACATCAGTACTGACTCGTGGATAATTCTTACATATGTGTTT
GTTTGTGTGCATGCAAATATATAATCGATGTGCTTTCTTTGCCCAATAATATGTTGTGGA
CAACTTTCAAAGTCAATAAATACAGATGACCTTCAGAACTTTTAGAGGTTTTAAAGTAAG
TATCTAATCAGTCTTCTACCAATGTACATTATACTTCCAAATTTTCCTTATTTCCAACAA
TACTGGGGTATCATCTTCATACATACATTTTTGTGCACTTATGTGCCTATTCCTTTGTTT

381   CAGGAAGACCACAGAGGTAAAGTACCATTTTTCATCACATCATATCGGGGATACATTATCA
TCTAGTTGAGGTACTGTGTGCCATTTTTTGCACCCTAAAGTTATTTCTTCCCCCCCACTCC
CCCTTTCCATCCTATACTCTTTGGAAGAAAGTTACTACGCATACCCACACTTAAAGAGTA
AACCATTGTACTTCACCTCCATGAGGGAGGGAGTATGTTCATAAAGTATTTACATTTCCT
GCAGGAGAGATTTGTCTATTCTCTCCTCATTATTTATTTAATCATTTACTTACATCAGTA
[C,T]
TGACTCGTGGATAATTCTTACATATGTGTTTGTTTGTGTGCATGCAAATATATAATCGAT
GTGCTTTCTTTGCCCAATAATATGTTGTGTGGACAACTTTCAAAGTCAATAAATACAGATGA
CCTTCAGAACTTTTAGAGGTTTTAAAGTAAGTATCTAATCAGTCTTCTACCAATGTACAT
TATACTTCCAAATTTTCCTTATTTCCAACAATACTGGGGTATCATCTTCATACATACATT
TTTGTGCACTTATGTGCCTATTCCTTTGTTTACTATTTTACCCTCATTTCTAAGGCAGAT

3505   GGCTGGTTAGGCAAAAAACAAATCTAAGACCTTCTGCATGACACTTTAACATAAATTCTT
TCACTTTATCCTGCAAGGTGAGCGCGGTCAACCCCATTTGGGTGAGAAAACTGTAGCTCA
GTGAAAGTGTCTTGGTGGGTAGTAGAATGGCAATAAAACACATATCAACTGACTTCAAGG
GCTAAGTGATTTCCATTACTAAATCAACCTCCCTCCCCATCATTTGGGGTAACTTTATAT
GATTAATAGTCTTTTTTTTTAACCTTGATTTTCTATTATTTTTAGAGTGAATATTTCTTA
[G,A]
GTCTTTAGTATGCATATGAGGAATGGGCAAGACTGTAATAAATTCTGAGACAAAGGTAAT
GCTGGGTTATGCTGAGAGTTTTAAAACCTGACATAAATACTATTAAACTATTTGTATCAT
TCTGCAACTTACTTTTCTTCCATTCCGCATCATGTTTGTGACTTATCCACATAATACCTC
AGTGTGAACTGATAACTCAAATTCTTTCCATTTTAACTTAGGTGGTTTGCATTGTTTGAC
TATATTATACTCTATGCATTCTCCCTCTGATGGGCATTTAGATTGCTTCCAAACTCATTC

10280   TGGGAGGGAGGTAATTACCTGGTGGGAGGTAATTGAATCATGGGGGCAGGTTTTCCTGTG
CTGTTCTTGTGATAGTTAATAAGTCTCATGAGATCTGATGGTTTATAAAGGGCAGTTCCC
CTGCACACTTTCTGTTGCCTGTTGCCATGTAAGACATGCCTTTGCTCCTCTTTCACCTTC
CACCATGATTGTGAGGCCTCCCTAGCCATGTGGAACTGTGAGTCCATTAAAACCTCTTTT
CTTTATAAATTACCCAGCCTCAGATATTTCTTCATAACAGTATGAAAATGGAGTAATACA
[G,C,T]
TCCATTACCATAAAGAAAAGGCTTTCATGTACATTATTTTTTAGAGTAGCCTTGTTGTGGTAT
GTCATTACCTCCATGGATAGATAAGAAAGTTGCAACTTGCACAGTATTAGGATTGATATC
AGTATTTACTTTTATTAAGTTGAACTTAAGAGCAGCTTTTTGGCTGGAAAAAAGTTGTAC
TTATGTCAAAGTTGTCCTGAAAGTAGAATCCTACTCCTGTCCCCAGCCTGAAACTATTTA
CTACATATTTACTTGCATGTTCTTTAGAATATTCTCTCAATAGTGTCTCCTACTCAAGTC

11107   GGAAACTCCAGCACACCTGGGAACTGCGCAGACCCACCACATAAGACAGATAGCCTATCA
GTGGCTGGAGGAATGGAGGAAAGCAGTGCTTTCAAATGTACATGCCAAATGTGTATGATC
ATACCTCTTTGTTAAAGTGCCTTCTTTAACAGCAAAGTAATTCCTCACCTTGCATATAG
GAACTAAAAAAAAGTCGATGAAGAAATGGCTTGCCTTATTTTCAAGTAAGAAGTCTTTTT
TCATTTCACTAATTTTTAATTATGGGCATAAGTATGAAATACAGATTAGAAATACTGAAT
[G,A]
TGGACCAAAGCAATGTTTCCTTTGTGGACCAAAGCAGTGAATCTTTTTTCTTTCTTTCTT
TCTTTTCTTTTTTTTGTTAAGAGACAGGGTCTTGCTCTCTTGCTCAGACTGGAGTGCAGT
CAGTGATGTGATGGCTCACCATAACCTCAACCTCTTGGGCTCAAGGGATCCTCCTGCCCC
AACCTCCTGAACAGCTGGGATTACAGGCACATACCACCACACCTGGCTAATTTTTTAAAAA
TTTTTTTGTGGGGGGAGGGTCTCTCTATATTGCCCAAGCTGGTTTCAAATGCCTGAGCTCA

15750   TGGCTCACTGCAGCCTCGACCTCCTGGGCTCAAGTGATCCTCCCACCTCAACCTCCCAAG
TAGTTAGGACTACAGGGGCATGCCGCTACACGTAACTAATTTTTGTATTTTTTTGTAGAG
ACAGGGTTTTGCCTTGTTGCCCAGGCTGGTCCTGAAATCCTTGGCTCAAGCAATCTGTCC
ACCTCAGCCTCTGAAAGTGCTGGCATTACAGGTCTGAGCCACTGCGCCCAGCCTAGATTT
TTTTGAATTGTAAAAAAAGTAACCTGCTCCCTACTGAAGTAAATAGAGTTAAAAAAAAGTAA
[T,C]
CTGGTACAGACACCTGTATTTTTCTGACACCCCTAGAAGAGTCCCAGGTACCCTATAATCA
AATACATTAACATTTCTGCAGCAAAATGTATGGATAAGTGAGTTAAATAGAGACCATGAG
TAGCTTCAGGTCAGTTCAGATCAAGTTTTGCTTCTAATTAAATGTTGATATTCTCTTACA
AAAACTTTGGGTTTGGGTTTTCAGATTTGCAAATAAATAATTATAAATTATTATTTTTTT
TGAGACAGAGTCTTGCTGTGTGTTGCTCAGGCTGGAGTGCCATGGCACGATCACGGCTCACT

FIGURE 3-44

16004 AAAGTAACCTGCTCCCTACTGAAGTAAATAGAGTTAAAAAAAGTAATCTGGTACAGACAC
CTGTATTTTCTGACACCCCTAGAAGAGTCCCAGGTACCCTATAATCAAATACATTAACAT
TTCTGCAGCAAAATGTATGGATAAGTGAGTTAAATAGAGACCATGAGTAGCTTCAGGTCA
GTTCAGATCAAGTTTTGCTTCTAATTAAATGTTGATATTCTCTTACAAAAACTTTGGGTT
TGGGTTTTCAGATTTGCAAATAAATAATTATAAATTATTATTTTTTTTTGAGACAGAGTCT
[T,A]
GCTGTGTTGCTCAGGCTGGAGTGCCATGGCACGATCACGGCTCACTGCAACCTCAACCTC
AGGCTGAAGCCATCCTCCCACTTCAGCCTCCCAAGTAGCTGGGACTACAGGAGTGTGCCA
ACATGTCCAGCTCATTTTTGTATTCTTAGTAGAGACAGGGTTTCGCCGTGTTGGCCAGGC
TGGTCTCAAACTCCTGGTCTCAAGTGATCCGCCTGCCTTGGCCTTCCAAAGTGTTGAGAT
TATAGGTGTCAGCCACTGGGCCTGGCAGAATTATACATTTATATGTCAATATTTGCTTTT

16871 GGGTATGAACAACTTTATAACACCTGTTACACATTGCCAGATTATTCTTTAGAAAACTTG
AATCAGTTTATTGTGCCACCAGTGATGTGCTGGCTTCCTGAAAACCCTACCAATGTTTGG
TTTTATTTTTATTAGTATTTGCTAATTTGATAAGTACTAATGATATTTTTTAAAAGTAGT
TTAAAATCATATTTCAGTGCTTATAAGTCTGTGTTCCCAGTTTTTGAGCCCTTTAGAAGC
TGCAAATGACCTGGCAATTATATATAATATTTGAAAATACAAGAGGACATATGCCAGTGA
[A,G]
TATATTAGAGTAAAACTTCATTCCCATAGGTAATGAAGGAATGCTTGAGATTATCTTAGG
CCTTAGATTCTCACCTGACACATCTTGGCAGGTAGACCATGTCCTTGTTTCCTCTGCTGT
CTTAGCCCAGGTGTTGATCAAGGTCTGTCTTAGGGCGGGGGATAGGAATGGAAATAAACC
ATGTAGAGACTTGGGCATGAGGACTTTGTGATTCTTCCAGGTGACATCTCATCCTTCAGA
GGATCAAGTCTGCAAGAGTAGCCATATCTTAATCTCTTTCAGTGCTATCACCTTGCATCA

17163 GCCAGTGAATATATTAGAGTAAAACTTCATTCCCATAGGTAATGAAGGAATGCTTGAGAT
TATCTTAGGCCTTAGATTCTCACCTGACACATCTTGGCAGGTAGACCATGTCCTTGTTTC
CTCTGCTGTCTTAGCCCAGGTGTTGATCAAGGTCTGTCTTAGGGCGGGGGATAGGAATGG
AAATAAACCATGTAGAGACTTGGGCATGAGGACTTTGTGATTCTTCCAGGTGACATCTCA
TCCTTCAGAGGATCAAGTCTGCAAGAGTAGCCATATCTTAATCTCTTTCAGTGCTATCAC
[T,C]
TTGCATCAACCTCTGGACTCGAGCTAATTCCGTTGAAAATATTTTATTAATTAATTTTGG
GGTATGTTAAAAATTTTGTTTGCATGTATTTATTTAGTTATTTTTATGAGACAGGGTCTC
GCTCTGTCACCCATGCTGGAGTACATACGGTTGCACGCTCATGGCTCACTGCAGCCTTGA
CTTCCCAGGCTCAAGTGATCCTCCCACCTCAGCCTCCTGAGTAGCTGGGACTACAAGTGC
ATGTCACCACATTTTGGCTAATTTTTCATATTTTTTGTAGAGACGGGGTTTCGCCACATTGC

17966 TCAAGCGATTCTCCTGTCTCAGCCTCCCGAGTAGCTGGGATTACAGACACACGCCACTAT
ACCTGGCTAATTTTTGTATTTTTAGTAGAAATGGGGTTTCACCATGTTGGTCAGGTGGGT
CTCAAACTATTGACCTCAGGTGATCCACCTGCCTCGGCCTCCCAAAGTGCTGGGATTATA
GATGTGAGCCACCATGTCCAGCCACCCATTTAATTTTTTGAGCACAAAATATGTACTGAG
AGCCACGCAAGAAACAAATTCGACTTATTCCATGCTCTTGAGAGGTCATGAGGGGAAACA
[A,G]
AATGATACATAAGTAACTCTGAGAGAATATGCTGCACATGCTAAATCCTGTGCAAGTAAG
ATATAGGATTTTAGAGGAAGGGAGAATGACTTCTGATTGAGCTGACTAGAGAAGGCTTCA
GTTTTTTGAGTTAGGTGTTACGGAGATTGGGAGACTTTTCTCAGCATATCTAACAGAAGAGG
GTATCCGAGGTGAGAGTGTAAGGCCTGGGCAAGGGTTGGGAGGCAGTTCTAATACTGAAT
GTTCTGACTGTGGTTTACTATGTATTTCAGGTTATTTTGTTTAATCTATCCAGTAATCCT

19392 GAACATGACATAATGGAAACCCAGAAATCCTGTCTTGAGCGGACTCAGGGGCTGCTTCTA
GGTAATTTAGTTCATTTCTACTGAAATCATTATATTTAAAAGTATGGCCGCACTGAGATG
GCCACTGTAGCTGCTGCCACCTCTTAGCTTTGGTCTTAAAAAAAAAAAAAAAGTAATAGAA
CTTCCTTAAAATGTCTTTCTAGCCTTTGGATTTCTCTAATTCAGATTTGCGTCTTCCCAA
GGGTCAAAATTATATTTTTACTATCCCTGTCTTAGGTATTTTCCAAAACTTCGTCTTAAGA
[C,G]
TTAGTCATTTTTTTCCTTCAATTTGACATGACTGCTAAAGACTTTTGGCATGTTCCTCCT
CCTTTCATTTGTGATGTAATTAAGTTGGTCTGTAAGTCTTATTTTTTAAGATGTTCTAGAC
CAAGAGACTGTGAGAATAGCTTACAGTCATTTCAACTAATTTATGTATTTTAAATTTAAA
GTATTGACAGTGGTGAAAACCTGTTCAACAAGCAGATGATGTTATCTTATATATTCACAG
AGTTTAGTAACTGAGCCAACTACTTCATTCACAGTTCAAAATGAAAACAGCTAATTCTTT

20113 TTGAGAAATATGGACTGTTTTTGCACATTCATAATGGACATTTGAGGTTTGTTAGGGGAG
GAGGTGTCATCTTTATGGCACTTTCTGGCTGGGAAGGGAGTCAGTCCTAATTGAGATAAT
AACTAGCCACCTGGCCACACACAAGTGTGTTTTGCCTTAGTTACCTGTCACACACTGAGC
AGTGAGACTCAAGAGAGTGTCAAAGTACTTTTCAATGCATAAAGCACTACAGATCTGTCC
ACACTGTTGTGAGTGAGCAGGTTGGCACGGTGCCTGTGTGCGGGCGTGTGTGTTGACTCA
[T,C]
GTGCTGTCCTGTGATCTCTCAGGACTCAGGTCCTGAATTGCTCTGTTGTGACTGAAGCCC
AGCTGAAGGTGCTGGAAGTGCAGTGACCCTGGAGGAAGAACCAGTAACAGCAGAGGGTGG

FIGURE 3-45

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          ATGAAAGGGAATTGATAGTTGTGTAAGAATAGATATCTGCCGTTTTTTGTAAGCCAAGAC
          ACCTTTACCCTTCCAGTAATTGTTTCATCTTTTAATATCATTTGGCTTCATTTACAGAAT
          CTGTATTAAAGCAAAAGTCAGCATGTAAGGTGGTATTTTGACCACATTTGTCTGCTGTTG

20434     AGGACTCAGGTCCTGAATTGCTCTGTTGTGACTGAAGCCCAGCTGAAGGTGCTGGAAGTG
          CAGTGACCCTGGAGGAAGAACCAGTAACAGCAGAGGTGGATGAAAGGGAATTGATAGTT
          GTGTAAGAATAGATATCTGCCGTTTTTTGTAAGCCAAGACACCTTTACCCTTCCAGTAAT
          TGTTTCATCTTTTAATATCATTTGGCTTCATTTACAGAATCTGTATTAAAGCAAAAGTCA
          GCATGTAAGGTGGTATTTTGACCACATTTGTCTGCTGTTGTGCCTTCTGGGTGAACTGAA
          [G,A]
          TACTGGCTTACTGACTAGTAAATATGTTTTCTGACAATTATAGGGAAGGGAAGAAAAGGA
          AAGTCCAATTAAAGCATTTTTCTCCTCAGAGTTTGAAAAATAGAATTCATGCAATCTTTT
          AAATTCCATGCCAACACATCAGACAAGAAGAGACTTGATAGTAGTAAAGGTTGGGAATCA
          AAAGAACAATGTAAGTTTTTGATATTGACTTCAAAACATGGTGTTCTATAATTTAGTGTT
          CATTTGTTACGTGTATGGTATTATAATTAATTTTGTATATGTGGTAGTTATTTTTTGTAC

21243     TAAATTAATCAGCGGTCACTAATCTTTGGATAATCACTCTATTGAGCTGGAACTATCCTT
          AGTATTTTGGAAAGCAAGTCAGTGAGTTAGAACTGTCAAAACTGATCAGCTTTTCTAAGC
          TTAATGATAAGTGAATAGAAACTAGTTGCCTTCAACCCTTTCCTCCCTGCATTGCAGCAT
          GATCATTCTGTAACTCTGGAAATGGTTTATGGAACAACAGTGAAAATACATTGATACACT
          GTCTTGTGGTAGATTTTCAGATAGGCTTTAGACAAAGTTCAGAGCCTTTCCTCTAGCTGG
          [T,G]
          GATTAACAAAGCTGCCTTCATAGTTAAATGTTTGCACCCTGTGTATGCATTTTCAGTTAC
          TAGAATTAGGTAAGTTAGTGTTATAAAATTGGTTTGAGTGTGGATTGTTTAGGAAGTGAG
          TCTTTTGGTGGCAGCAATTCTGTTATGCATTAAATAGATACATATTTTGAACTAGTCGAC
          ATTGTTTCAGTCTGTATTTATTAGATGCTGGGGTGGGTATGGGAATAAAGAAACGTATGA
          GGGGTCTTGGAAAAGTTCATGGAAAAAATGTACACTATGAAAAAAAACTGTGCATGGATT

23009     TTCTTTCCTAATCTTAAAAAAATATTTAAAGGGCACCTATTTTTTCTTCAGTTAATAATGTA
          AAAAGGACTGCATTGACATGATTAAATTCCTGGGACCCCTCAATTCTTTAGAGATGGACTA
          ATGGCTGGTATCAACTCACAAAAGTATCTTGAACTTGATGGAGCTTATGTTGAGAAATGA
          AGTGTATATTTTCATTATCTTTTAATTTCATTCTTTAGTGAATTTTTTTGAGGTCCCCTTG
          TATACATTTTAATCCTAAGGGAATAAAGAAAGGAGGAAGTCCTAGCCCTGTGCTGTCTGC
          [C,T]
          TAGGTACAGTGTCTGAAACACAGACCAGTATTCACCCTTTGAAATTTGAGGTTTCCATTC
          AGGAGGTTCTCAAAGAGAATAAATGAGATTGCTATGCAGGTGGAATCAAAGAGCACACGG
          CTTATTTATCATAATCAAAATAATGCCATTTTCATAACAAACTTCACCTGCTTATGTACA
          TTGTAAATTGTTGCCTTGATAAGCTTCCCGGAGATAAAGTAATTCAGCTAAGTATTATTT
          CCAATCATAATTTTGTGTGTCATTATGAGCAACACAATACTATATATGGGATTGATTCACTG

24699     TTTAGAGGATTGGATGAATAGTGGTGCTGCCAATAAAGAAATTTAAATATGGCTGATATT
          TCCTATATTTAAGAAAGACCAAAGAGGGTCCATTGAAATGAGTCAGTGGGAAATCTCTGA
          TGACTTCAGCCAGCACGCTTTCATCGGCCTGGATATATGGGAAGTGAAGTCTGATTATAG
          TCTGTGGAGCAGTGAATGGGAGGAAGAGATAGGGGTACAGGCTAAGAAGGGAGGAAGTCA
          AGTCAAAGGGAGAAGTAGGGTGGTAGCTAGAGGAAGATTAGAGTCAAGCGAGGGTAACAA
          [-,T]
          TTTTTTTTTTTTTTGAAGATAGGAGTAGCTTGAGAACTAACTTAAAGAAGGAGCCTGTAGA
          GAGGGAGGAGGTGAAGTTACTAAAGGTCTAATTGATGGGGTAAGGTTCATGAGCAGATCA
          GATCTTTACAAGGAAGGTTCTTGCTGGGGGGCAAGATTCAAAACCCCTATTCAGAACCAG
          GAGAGAAGAAAGTAAGAATGGGAGCAAATGTAGGTAGGTTTGGTGAGGATCAGGAAATGG
          AGGGGAAGAGGTCATTAAATGTGGTCCTGGGGTTGAGCAGCAGATTGGAAGAGAATGGCA

28058     GCAAGGTGTTTTTCGATCACATGGAAAGGGGAAGAAGAAGCTATCAGGAGCTCTGGGGTT
          TTTTTGTTGTTGTTTGTTTGTTTTGCCACTTTTTAACTCTCAAGCTAAAACTGGGGTTTC
          ATTTGAGGAACCAGTAATAGAAAATTTCTTATGTACATTCAGCAAAATCTAGTACTGAGT
          GGTTACTTTGGCTTTTCATTGTGGGGATTGTGTGTGTGTGTGAGTACATGCACGCACTTGTG
          TGTTTAAGCGTGTAAGGCAGACAGACAGTGGGTACAGGTCTTTGAAATGGACTTCTTGGC
          [A,T]
          AAAGTAATAGAGAAAAAGAGGAATACAAATAAGGGAGGAGGGACAGGGAAGAGCAGAGTC
          ACAGGAAACAGTGAATGAGGCTGCAGTCTCAGTCGCCCTTTCTTTGTCCCTCCAGTGTTG
          TTGCCTGTCTTATGATGATGCTGGTTTTCAGCCAACCTTGAGTGAGTAAAAGCCGGGTCT
          GAGGTCTCAGTGCCTGCGTGGCTGATATGAGCAGCTTGCATTTCTGACTGGGCCCTGGAG
          CAGCAACAGCACAGATTTCCAGGAACAGTTCCTCTCTTGTCATTTTTATTCCTGAGTCATCA

29600     ACTGCAACCTCCTTAAAGCTACATTATTTAAAAGTCACATACAAAGCAAGTTGCAGAAGC
          CTGTATGTGAGTGGATTCTATTTTTTTTTAAATAGTATTTAATTGTATGTTCTTCTACACTT
          TTTCCTATGTCCATCTTACCATAGCTGTGTGCCTTTTTTGGTGGAAGTGAGGACAGATTGCT
          TTCCACATCTCCATTTTTGTGTCTGAATTAAAAGATGGACAAGTATCATGTATTATCTTA
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FIGURE 3-46

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          GTAGTCATCAAACAAGGAAAAAGGTTTTCTTTGTTTGCTTGTTTTTTTAGATGAAGTCTC
          [T,C]
          GCCCAGGCTGGAGCGCAGTGGCACGGTCTTGGCTCACTGCAACCTCTGCCTCCTGTGTTC
          AAGCAGTTCTCTGCCTCAGCCTCCTGAGTAGCTGGGATTATAGGCGCCTGCCATCACGCC
          GGCTAATTTTTGTATTTTGAGTAGAGACAAGGTTTTGCCAAGTTGGCCAGGCTGGTCTTG
          AACTCCTGACCTCAGGTGATCCACCTGCCTTGGCCTCCCAAATTGTTGGGATTACAGGCG
          TGAGCCACTGTGCCCGGCCTGGAAAAAGTTTTTTAATGGTAAAGATGTCATGGAATGAATA
```

31455   ACTTAATTCGTTGTGGGCAGCCAGATCTTTTTAAAGGTAAATTTGAATTTCTCTCTTTAAGAA
          AATGGCAGACAGAAGGATGGGGGATACTAGAAAACTAAAAGTAGTGCCCCCTTTGAAGAT
          AAAACTAAAACATTTTAAGCCTGGAATTGCTTTAGCAGTACATGTATTGATTATTTAATT
          TTGTCCTTTAGAAGAAAGTTGGCCCAACACAATTACATGGAAGTTGGGTTATTGAAGAGG
          ATTGATAAAAGAAGTGGGAAGGTCAGGCCAGGTGTGGTGGGTCATGCCTGTAATCCCAGC
          [A,G]
          CTTTGGGAGGCCGAGGTGGGTGGATAACGAGGTCAGGAGATCGAGACCATCCTGGCTAAC
          ACGTTGAAACCCCGTCTCTACTAGAAATACAAAAAAAATTAGCCCAGCATGGTGTTGGGT
          GCCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGGAGGCG
          GAGGTTGCAGTGAGCCCAGATCAAGCCACTGCACTCCATCCTGGGCGACAGAGCGAGACT
          CCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAGTGGGAGGGTCAAAGCCAATGTGCACGT

35653   CTAATAGAAAAAAATATATATATTTTTGTCAAATATTTCTGTTTTATTCATTCATTCAAAGT
          ATATTTGGAATGTTTATTTCCAGGAAATTTTTGGAATATACAATACAACCAGCTTCTTATA
          ACTCCACTTTAAGTGAGCCATAGGTCAAATAATGACCAGCAAAATGTAATGACACGTGTG
          CCTCTTACTCCCTGTTGGAGGAATTGAGGCACTCTGGTAACCCTGTAGGCCTGGATTAGT
          CCAGTTCATTGGCAGCAGCATTATCCAGATTTTATTGTGGCCGGCAACGGTGGCTCACAC
          [T,C]
          GGTAATCCCGGCACTTTGGGGGGCTGAGTTGGGCCTGTTGCTTGAGCCCAGGAGTTCAAG
          ACCAGCCTGGGCAACATAGGAAACCCTGTCTCTACAAAATATATAAAAATTAGCTGGGCG
          TGGTGGCGTGTGCCTGTAGTACCAGCTACTTCGGAGGCTGAGGCAGGAGGATCACCTGAG
          CCCAGAAAGTTGAGGCTGTGGTCAGCTCTGATTATGCCACTGCACCCCAGCTTGGGTGAT
          ACAGTGAGACCCTGTCTTAAACAAACAAAGAGATTGTATTGTGTTTTGAAAAACATAGT

42700   AGCTTTTCTCGTCTCTACTGAGGCCAAAAGGGGCAGTGATACCCTTGAATTTTTCTTCTTA
          AAACAGGGTTTCATTTCCTTGGAAGTTTGTTTCTTTGAATCTTTCTGTCAGTTTAACTGT
          TATCATCAATTGGTTAGCATTCTAATAATAATTATAATTATAGTAAACATTTATTGAGTG
          CTTACGAAGAGCCAGTTCCAAGCTTTTTTATCTCCATTATTCTGCTACTTTCCTTCTCAT
          TTTACAGATGAGGAAAATGAGGCACAGAGTGGTTAATTAATCTGTTTGAGGTCCCGTAGC
          [A,G]
          GGTCAGTGATGCCCAGGGTTCAAACCTACACTTAACTCTACACTAGAGACTGTTTTCTTAA
          TTATTTCTTCACAATCATATGTTTAATGATTACTTATTGATTATTTAGTGGTCTGATAAG
          AAGAGGGAGCCGGTGCTCTTCTGTTGGAGAAGAAAGGCTGGCTGATCAAGACACACTGGTT
          GGTTTGAAGAAAAAATATAGATGTTAATTCCATAACACCACACTCTAAACATTTCTACTG
          GACGAGTTCCACCTGTGTGCCACTCGAAGTCGGATGCAGTAAGGAAGGCTTTTTATTGAG

45516   GTTACTAGCTATGTAATCTTGAGAAAACTACTCAATCTCTCTGTGCCTTAATTTTTCTTAG
          GTATAAAGCAGATACTAATTATGCCATCATAGGGTAGGTATGAGGATTAAATGAGTGAGT
          ATTTGTAAAACACTTAAAACAGTGACTGACTTGGGCTACCCCTTTTGGGTCCCCTCCCTT
          TGTATGGGAGCTCTGTTTTCACTCTATTAAATCTTGCAACTTCACACTCTTCCAGTCTGT
          GTTTGTTATGGCTCAAGCTGAGCTTTCGCTCGCTGTCCACCACTGCTGTTTGCTGCCATC
          [G,A]
          CAGACCCGCCGCTGACTTCCACCCCTCTGGATCCGGCAGGGTGTCCACTGCACCTCTGGT
          CCAGCGAGGTGGTGCCCATTGCCGCTCCCAATCGGGCTAGGGGCTTGCCATTGTTCCTGC
          ACGGGCTAAGTGCCCTGGGTTCATGCTAATTGAGCTGAATAGAGCTGTAACACTCACTGT
          ATGGCCCAAGGTTCCATTCCTTGGAATCTGTGAGGCCAAGAACCCCAGGTCAGAGAAGAA
          GAGGCTTGCCGCCATCTTGGAAGCAGCCCGCCACCATCTTGGGAGCTCTAAGAACAAGGA

51789   AGAAGAACCGCTAGTATGGGGTAATCCCCTCCAAGAAACCAAGCCCCAGTACTCAGAAGA
          AGAAATAGAATGGGAAACCTCATGAGGACGTAGTTTCCTCCTCAGGATGGCTAGCCACCA
          AAGAAGGAAAAATACTTTTTGCCCTGCAGCTAACCAATGGAAATTACTTAAAACCCTTCACT
          TAGGCATTGATAGCACCCATCAGATGGCCAAATCATTATTTACTGGACCAGGCCTTTTCA
          AAACTATGAAGCAGATAGTCAGAGCCTGTGAAGTGTGCCAAAAAATAATCCCCTGCACTT
          [C,T]
          AGGCCATGCCATTTCAATCCCTGAATCTTTTAACCTCCTTGTTAAGTTTGTCTCTCTTACAGAA
          TTGAAGCTGTAAAGCTACAAATGGTTCTTCAAATGGATCCCCAGATGCAGTCTATGACTC
          AAATCTACCGCGGGACCCCTTGGACCGGCCTGCTAGTCCATGCTTCGATGTTGATGATATCA
          AAGGCACCCCTCCCGAGGAAATCTCAAGTGCATGACCCCTTAGTTGCACCAGTTCAGCAGG
          AAGCAGTTAGAGCGGCCCGTTGGCCCAACCTCCCCAATAGTACTTGGGTTTTTCCTGTTGAGA
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<p align="center">FIGURE 3-47</p>

52042
GATAGTCAGAGCCTGTGAAGTGTGCCAAAAAATAATCCCCTGCACTTCAGGCCATGCATT
TCAATCCCTGAATCTTTAACCTCCTTGTTAAGTTTGTCTCTTACAGAATTGAAGCTGTAA
AGCTACAAATGGTTCTTCAAATGGATCCCCAGATGCAGTCTATGACTCAAATCTACCGCG
GACCCCTTGGACCGGCCTGCTAGTCCATGCTTCGATGTTGATGATATCAAAGGCACCCCTC
CCGAGGAAATCTCAAGTGCATGACCCCTTAGTTGCACCAGTTCAGCAGGAAGCAGTTAGAG
[C,T]
GGCCGTTGGCCAACCTCCCCAATAGTACTTGGGTTTTTCCTGTTGAGAGGGGTTGCTGAGA
GACAGGACTAGCTGGATTTCCTAGGCCGACTAAGAATCCCTAAGCCTAGCTGGGAAGGTG
ACTGCATCCACCTTTAAACACGGGGGCTTGCAACGTAGCTCCACACCCGACCAATGAGGTAG
TAAAGAGAGCTCACTAAAATGCTAATTAGGCAAAAACAGGAAGTAAAGAAATAGCCAATC
ATCTATCACCTGAGAGCACAGGGGGAGGGACAATGATCAGGATATAAACCCAGGCGTTCT

52139
CTCTTACAGAATTGAAGCTGTAAAGCTACAAATGGTTCTTCAAATGGATCCCCAGATGCA
GTCTATGACTCAAATCTACCGCGGACCCTTGGACCGGCCTGCTAGTCCATGCTTCGATGT
TGATGATATCAAAGGCACCCCTCCCGAGGAAATCTCAAGTGCATGACCCCTTAGTTGCACC
AGTTCAGCAGGAAGCAGTTAGAGCGGCCGTTGGCCAACCTCCCCAATAGTACTTGGGTTT
TCCTGTTGAGAGGGGTTGCTGAGAGACAGGACTAGCTGGATTTCCTAGGCCGACTAAGAA
[T,C]
CCCTAAGCCTAGCTGGGAAGGTGACTGCATCCACCTTTAAACACGGGGCTTGCAACGTAG
CTCACACCCGACCAATGAGGTAGTAAAGAGAGCTCACTAAAATGCTAATTAGGCAAAAAC
AGGAAGTAAAGAAATAGCCAATCATCTATCACCTGAGAGCACAGGGGGAGGGACAATGAT
CAGGATATAAACCCAGGCGTTCTAGCCGGCAACGGCTACCCTCTTTGGGTACCCTCCCTT
TGTATGGGAGCTCTGTTTTCACTCTATTAAATCTTGCAACTGCACAAAAACCAAACCAAA

53089
GATAAGTGAATCTTCAGAGAACTGGCCTTGAGCCAGCTCTACAACTAACCAGCTCTGTGG
CCCTTTGGAGAATTTCTTAATATTTGTAAACCTCAGCTTTCCTACCAGTGAAATGAAGTT
AGTCCTCCCTGTCCTGCAGGGTTGCTGCAAGGATTTAACAACATGTATATGTACAAACCA
CTTAGTCCTGTGCTTGGCCTATTTGGTGCTTTTTTTTTTTTTCTTTTTTTTAAGACAGGGGTC
TTGCTTGAATCTTGCTGAGGCTGGATTCAAACTCCGGGGGCTCAAGTGATCCTCCTGCCTC
[A,C]
GCCTTCCAAGTAGCTGGGACTACAGGCCTGCACCACTGTGCCTGGTGGCAGTGCTCGTTG
AATGTTTCTTTTTCCTTAGTTCCTTCCTAGCTCTTCTGACAGTTTTGGGGCTTATGTATAT
AAGAAGGACTTGGTTGCCTCAGGGAGAGAGGATGCAGTAGAGTTACATAGCTCACCTCAC
ATCCTCCAAAAGCTGAATTCATAAGTAAACAAAGTGAGCATTTCACCCATACTTTACACA
AAGTCTAGAATATTTATGGTGTCCATCAGGCTCACATACTGTGACCTTCTGAGATACTTT

53117
TGAGCCAGCTCTACAACTAACCAGCTCTGTGGCCCTTTGGAGAATTTCTTAATATTTGTA
AACCTCAGCTTTCCTACCAGTGAAATGAAGTTAGTCCTCCCTGTCCTGCAGGGTTGCTGC
AAGGATTTAACAACATGTATATGTACAAACCACTTAGTCCTGTGCTTGGCCTATTTGGTG
CTTTTTTTTTTTTTCTTTTTTTTAAGACAGGGTCTTGCTTGAATCTTGCTGAGGCTGGATTC
AAACTCCGGGGGCTCAAGTGATCCTCCTGCCTCAGCCTTCCAAGTAGCTGGGACTACAGGC
[C,A]
TGCACCACTGTGCCTGGTGGCAGTGCTCGTTGAATGTTTCTTTTTCCTTAGTTCCTTCCTA
GCTCTTCTGACAGTTTTGGGGCTTATGTATATAAGAAGGACTTGGTTGCCTCAGGGAGAG
AGGATGCAGTAGAGTTACATAGCTCACCTCACATCCTCCAAAAGCTGAATTCATAAGTAA
ACAAAGTGAGCATTTCACCCATACTTTACACAAAGTCTAGAATATTTATGGTGTCCATCA
GGCTCACATACTGTGACCTTCTGAGATACTTTTCCCTCTCCATTCCCTTTCCTTCTCCCT

53434
GTGGCAGTGCTCGTTGAATGTTTCTTTTTCCTTAGTTCCTTCCTAGCTCTTCTGACAGTTT
TGGGGCTTATGTATATAAGAAGGACTTGGTTGCCTCAGGGAGAGAGGATGCAGTAGAGTT
ACATAGCTCACCTCACATCCTCCAAAAGCTGAATTCATAAGTAAACAAAGTGAGCATTTC
ACCCATACTTTACACAAAGTCTAGAATATTTATGGTGTCCATCAGGCTCACATACTGTGA
CCTTCTGAGATACTTTTCCCTCTCCATTCCCTTTCCTTCTCCCTGCTGGCTTTTTTTTTTT
[-,T,C]
TTCTTCTTCTTTTTTTTTTTTTTTTTACTGTGAAAAACAACCTATATACAGAATAGTACAA
AAACATACCTGTATAGTTTGAAGAGTAATTATTAACAGTCTTATTAAGAAACAATGCTCC
ATCCATGTTACTGCAAAAGACATGACCTTATTCTTTTTCTTCTTAATTTTTTCTTTTTTTC
TTTCTTTATTTTGGCCCTTTTTTCAGATCTAGACCTGCAGAGATCTTGTTCTTTTTTTGAG
ACAGCATCTCGCTCTGTCACCAGGCTGGAGTTCAGTGGCGTGATCTCGGCTCACTGCACC

55431
TAATTATTTTATTTTATTTTATTTGAGAGAGGGTCTTTCTGTGTCACCAAGGCTGGAGTG
CAGTGATGCAATCATGGTTCACTGCAACCTCAACTTCCCGGGCTCCAGTGATCCTCCCGC
CTCAGCCTCCCAAGTGGTTGGGACTACAGACATGTGCCACCAAATCCAGCTAATTTTTAA
ATTGTTTTTAATAGAGGTAAGGGTCTCACTATGTTGCCCAGGCCAGTCTCGAATTCCAGG
GGCTCAAGGGATCCTTTTGCCTTGTCCTCCCAGAGTGCTCGGATTTAAGTTGGGAGCCAC
[T,G]
ATACCCACCCAACATAATTCAATTATTTAATATTTCACATGTTTTAGTATTCCTTTGATA
GGGATGTGATGTTTGGGTGAATAATAAAGTAAATCAAAGACATATATTTGAAAATTATGT

FIGURE 3-48

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          AGTTATTCTAAAAAATTAATTATTTACCTTTATTTTAGCAAAATCAGTGTGTTAGCATAA
          TCAAGATATTTTGGTATTCTAGTAACAAGATCTAGTCACAGTAATGATGTAAAGATTAAA
          AAATAAAATATAATAGGAACCAGTATAAACAAGTGGAATTTAAATTTAAAATGCAATACC

55905     AGCATAATCAAGATATTTTGGTATTCTAGTAACAAGATCTAGTCACAGTAATGATGTAAA
          GATTAAAAAATAAAATATAATAGGAACCAGTATAAACAAGTGGAATTTAAATTTAAAATG
          CAATACCAGCTGGGTGCGATGCCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGC
          AGGCGGATCACCTGGGGTCAGGAGTTCAAGACCAGCCTGACCAACATGGAAAAACCCCAT
          CTCTCCCAAAAATACAAAATAAGTTGGGTGTGGTGGTGCATGCCTGTAATCCCAGCTACT
          [C,T]
          GGGAGGCGGAGGCAGGAGAATCACTTGAACCAGGGAGGCAGAGGTTGTGATGAGCCGAGA
          TCACACCATTGCACTCCAGTTTGGGCAACAAGGGCAAAACTCTGTCTCAAAAACAAAAAG
          AAACAAAAAACACAGTACCATTTACATTAGCACCCCTCAAAATGAAATACTTAGGTATAA
          ATCCAGCAAAATAGGTATAAGAGATATATAAGTAAAACTATAAAGCTCTGATGAAAGAAA
          TAAAAGAACCAAATAAATGGACAGATATTCCATGTTCATGGATAGGAAGACTCAGTAATG

60567     TAAATATGACATTAAAAGCACAAACAACAACAAAATAGATTAATTGGACTTCATCAAAAT
          TAAAACCTCTGTGCTTCAAAGGGCACACCAAGAAAGTGAAAAGAGAATCCACACAATGGG
          AGATAATTTTTTGCAAATCATGTATTTTACAAGACTGGTGTCCAGAATATATAAAGAACA
          CTTGCAACTCAGCAATAAAAAGACAAGTAACACAATTTAAAAATGTTGAAAGGATTTGAA
          TAGACATTTCTTCAAAGAAGACATATAAATCACCAATGAGCATATGAAAAATGTACTCAAC
          [C,T]
          TCATTGGTCATTAGAGAAATGCAAATAGAAGTCACACCCATTAGGATGGCTAAAATAAAA
          AAAGATGAACAATAACAAATGTTGGCAAGTATGTGGAAAAATTAGAACCCTCATACACTG
          TGGATGGGAATGTAAAATGGTGCAGACACTTTGGAAAGTTGGCTATTCCTCAGAGATTTA
          CCACATGGCACAGCAATTCTACTTTTAGGTGTATACCCAAGACAATTAAAAAGATATATA
          CAGGCCGGGCGCGGTGGCTCAAGCCTGTAATCCCAGCACTTTGGCCAAGGTGGGTGGATC

60751     CAACTCAGCAATAAAAAGACAAGTAACACAATTTAAAAATGTTGAAAGGATTTGAATAGA
          CATTTCTTCAAAGAAGACATATAAATCACCAATGAGCATATGAAAAATGTACTCAACCTCA
          TTGGTCATTAGAGAAATGCAAATAGAAGTCACACCCATTAGGATGGCTAAAATAAAAAAA
          GATGAACAATAACAAATGTTGGCAAGTATGTGGAAAAATTAGAACCCTCATACACTGTGG
          ATGGGAATGTAAAATGGTGCAGACACTTTGGAAAGTTGGCTATTCCTCAGAGATTTACCA
          [C,T]
          ATGGCACAGCAATTCTACTTTTAGGTGTATACCCAAGACAATTAAAAAGATATATACAGG
          CCGGGCGCGGTGGCTCAAGCCTGTAATCCCAGCACTTTGGCCAAGGTGGGTGGATCACGA
          GGTCAGGAGATCGAGACCATCCTGGCTAATACAGTGAAACCCCATCTCTACTAAAAATAC
          AAAAAATTAGCTGGGCGTGGTGGGGGGGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAG
          GCAGGAGAATGTCGTGAACCCGGCAGGCGGGGCTTGCAGTGAGCCGAGATTGCGCCACTG

60755     TCAGCAATAAAAAGACAAGTAACACAATTTAAAAATGTTGAAAGGATTTGAATAGACATT
          TCTTCAAAGAAGACATATAAATCACCAATGAGCATATGAAAAATGTACTCAACCTCATTGG
          TCATTAGAGAAATGCAAATAGAAGTCACACCCATTAGGATGGCTAAAATAAAAAAAGATG
          AACAATAACAAATGTTGGCAAGTATGTGGAAAAATTAGAACCCTCATACACTGTGGATGG
          GAATGTAAAATGGTGCAGACACTTTGGAAAGTTGGCTATTCCTCAGAGATTTACCACATG
          [G,A]
          CACAGCAATTCTACTTTTAGGTGTATACCCAAGACAATTAAAAAGATATATACAGGCCGG
          GCGCGGTGGCTCAAGCCTGTAATCCCAGCACTTTGGCCAAGGTGGGTGGATCACGAGGTC
          AGGAGATCGAGACCATCCTGGCTAATACAGTGAAACCCCATCTCTACTAAAAATACAAAA
          AATTAGCTGGGCGTGGTGGGGGGGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAG
          GAGAATGTCGTGAACCCGGCAGGCGGGGCTTGCAGTGAGCCGAGATTGCGCCACTGCACT

63301     TCTTTACAGAAGTTGGGCTGCTCCTGGTGGACAGTGTGTAACAGTGAACAATGTATGCTC
          TAGACTGGGTTCCCTTCCTCCACCCTGTGTCTGTGTGGCCTTGGGCAAGTTGTTTAACCA
          ACCACTTTTTGCCTCAGTTTCTTTATCGGAACAAGGAGAATAAGAATACTTCAATCAGGC
          CAGGCGTGGTGACTCACGCCTGTAATCCCAGCCTTTGGGAGGCCGAGGTGGGTGGATCAC
          CTGAGGTCAGGAGTTCCAGACCAGCCTGGCCAACATGGTGAAACCCCATCTCTCCTTTAC
          [T,G]
          TATGCTGGCCTGATATTGATCGTCCATGGTAGAATTGATACTGCTTGACAAAGCAGCCTA
          TTTCAGTCAGGACCCTTCTTCTCTAGTTTCCTCTGTAGCTATTACCTTAGCCTTCCATTT
          CATTCTTCACACTACAGATACTCTCATTGATAAAGGAATGATGTCTTTATGCTTTCAAGC
          ATTCTGGCAAGTTAGTAATTCAACTATGATTCTAGGTCAGACAAAACCAGTTATGAACAT
          AAGACTGTTTTTAATCTCCTCCCTGGTCCCCCAACCACCCACCCCAATCAGGAGAAACTA

64573     CCTCACCACCCATTACTTTGTGTGACTTTGAGCAAGCTTTAAAACGTCAGTGTCTCAGTT
          TTGTCAACTGAGTAGATACCTCATAGAATTGCTGTTGATATTAAGTGACTTAATCCTATG
          GGCTGAATTTGTCTCCCAAAGTTCATTTGTTGGAAACTTAATCCCCAGTGCATGTGTTAA
          GAAGTGGGACCTTTCAGAGTTGAATAGGCTATGAGGGCTCTGCCTTCATGAATGGATTAA
```

FIGURE 3-49

```
TGCCGTTGTTGCAGTAGTGGGTTCCTTATAAAAGGAAGTGTTTGACCCCCCTTTCCTTGCC
[T,A]
CCTCATGCATGTGATGGCCTTAGCCATGTTATAATGCAGTAGTAACGCCCTTACCAGACA
CTGGCTCCTTGATCTTGGACTTCTCAGCCTCCAGAACTGTAAGAAATAAAAGTTTTTTCT
TTATAAATTACCCAGTCTCTGGTATTCTGTTATGGCAGCAAAAAACAGACTGAGACACTT
AATATATATGAAGCATCTAGACTGTCTGGCACATTGTACATTTAAATCCCAGATATCGA
TATCATCAATATCATCATCATCATCATCTGTGGCTGTATAATACCTCCCTCTGCATTTAA
```

76462
```
GCTCGGCTTTGGTCAGCTTCTTTGGTCTTATTTTCCCAAACAAAGAAACCTCTGGGTTAC
GGGCACCCTGTTTACTCCTATCACCTGGCAGGATTTGCAGGATAATTGCCCAGAACTAGA
ATATTGATCCAGATTTTTACATCACCCATCCCTTTGTTTCTTCTGAGCTGCAGCTGATG
ATCACTGGTTGGTTCACAGAAATAAGCAGGGTTAGTCTAAAATGCAGACAAAAACTTAAA
AACAACTAATGAGACTAGAATTTAATGAAAAGTGTATGATAAATTTTGAAACATAATTTT
[T,C]
CTCTCTCCAGTCCTCATTTTTGTTAAAAACAAATCATGATAGGACTGAGTCATTTGCAGA
ATAAACTTTAGTCTTATATTTGGCCTGGTTATTTGCATAAAGCACAGCAAGAATAATTAT
TTTTCACACAGGCTTTTAAAAATTGGCTTTTGATGGAACTCTGTTCCACAAGGAATTTCAGA
TAAGACCTTTTAAAGCTGAGCCCAGCCATGGGTTTGTATCCTCAAATACCTATGAGTTGG
GTAAATTCCTCTCTTCTTGAGGTCCCAAGATAACATGGGGTTCCTGGGCCTATTAGAAAG
```

77652
```
TCCCATAGCTGATTATAAACCATCTTTTGAAAAGGATCAAAATAAGACAATTGTCTGTGA
ATGACAAAATGTCTTTGGGTAATAACAGTCAAAGCCATGATTGACAAAGAAATTTGGTTA
TTTCTGAGCTTTACAATAACAACATAATAATTTTTTTTTTTTTTTTTTTTTTTTGAGACGG
AGTCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCGGGATCTCGGCTCACTGCAAGCTC
CGCCTCCGGGTTCACACCATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGC
[G,A]
CCCGCCACTACGCCCGGCTAATTTTTTTGTATTTTTAGTAGAGACGGGGTTTCACCGTTTT
AGCCGGGATGGTCTCGATCTCCTGACCTCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGC
TGGGATTACAGGCGTGAGCCACCGCGCCCGGCAACATAATAATTTTAATTACGATTGATA
GCATATACTCAGACATTAGAATTTTTAGAAACCTCATAGAATTTTGGAACATATGTATTT
TCATTAAAATATAAACCTGAAGAAGATTAAACATTATTTTTATTTTGGCAATCCCACATAA
```

77819
```
TTTTTTGAGACGGAGTCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCGGGATCTCGGC
TCACTGCAAGCTCCGCCTCCCGGGTTCACACCATTCTCCTGCCTCAGCCTCCCAAGTAGC
TGGGACTACAGGCGCCCGCCACTACGCCCGGCTAATTTTTTGTATTTTTAGTAGAGACGG
GGTTTCACCGTTTTAGCCGGGATGGTCTCGATCTCCTGACCTCGTGATCCGCCCGCCTCG
GCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCGCCCGGCAACATAATAATTTT
[G,A,C,T]
ATTACGATTGATAGCATATACTCAGACATTAGAATTTTAGAAACCTCATAGAATTTTGGA
ACATATGTATTTTTCATTAAAATATAAACCTGAAGAAGATTAAACATTATTTTTATTTTGG
CAATCCCACATAACTAAACATGTCAGTTAATCCTGTTACCTCTCTTTTGGATGCTCCAG
GAGCCCTCTGTAGTATTCAAAAGTAAGGGGTCAGAAAAGACAAACCTTGAAACTGAAGTTT
GATTTTGGGAAGCCTGTTAAGTACATTAGAGGTTTAAAAACACTTTATATTATGAAATACA
```

79594
```
TAGCTTTTATTTTTCCTTCAGAAAATATTTGATCTAAGTGCTTATTTTTCTCTAAGCCAA
TTAATTAGAGCTCTTTTTTATACAAACATCACACATATTGCACATATATAACTACACAGA
CAGAGGATCCAGTAGTTGTAAGATTTTTTCATTGTCCAATCTCCTAATTAGATTACTGACC
TCAGGATGGAGCCCTTCAAGAGCAGGGCTAGGAAAGCATGCAGTTTCTAGGGCCTAATAA
ATAGTTATAGCTGGAAGACAAAAACAGATTTTGAGAGGGATTTATCTGCTTTTAATTCTT
[T,C]
GGGTTTCATGAGGAAAACAGAGGTTTTTTTCTAAAATGGGGTCAGTGGTGCCTCTTCCAT
TTTTTTCCAGGGAGTCCCAGGCCATCAGAAGTTATCTTAGGGCCTCTCATGCGTGCATTAA
GAGAGGCAAGACAAAATGGAGAAAAGTAATTCAGTTGACTGAAAAGAAAATCTTTTTCC
AGTGAAACAAGATGCAAGAAGAGGAAAACATAGAGGCCTTTTAAATATGCCTATAGCTTG
GATATCCACTTTTAATTAAGCTGACTTTTTACCATAGTGCTCTTATTTTTAAAAAAATCCTT
```

84331
```
ATTGACCAAAAGAATCAAATGGGCCTGTTGAAGTGTTCATCTAGTGTCAAGGGAAAATTT
TTCCCCACTGAATAAATTTTAAGAAGGCAGTCAAGACAAGAAGCTATATTTGATTATATC
CTGTTAGTGCTTATTCAATAGACACATAAATCTGTAATTTTTAATATTTGGTATAGAAGT
AGGTTGAAATCCACAGTAATTCACAGAAACTTGTGCAAGGGTTTTGTTTTCTTTTCTTTT
CTTTCTTTTTTTTTTTTTTTTTTTTTTTGAGACAGAATCTCACTCTGTCCCCCCAGGTTGGAGTAC
[A,T]
GTAGGATGACCTCGGCTCACTGCAGCCTCCACCTGCCAAGGTTCAAGCAATTCTTGTGCC
TCAGCCTCCTGAGTAGCTGGGATTACAGGCATGAGCCAACACGGGCGGCTAATTTTTTGTA
TTTTTAGTAGAGACGAGGTGTCTCCATGTTGGCCAGGCTGGTCTTGATCTCCTGACCTCAGG
TGATCTGCCTGCCTTGATCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCATGCCCG
GCCAAGGTCTTTTTTTCTTGAAAATATCTTCACTCATATAAGCAGTATATGCAATATAAGG
```

FIGURE 3-50

86107 TCAAGACCAGCTTGAGTAGCAAAGTGAGACCCTGTCTGTACAAAAGAAACACACACAAAA
GAAATATGACTGACTAAAATACATATAATTTTTCATAATACTTTAAAATGTAAGAAGGCAA
AAAATTTCTGGGCTCAAGGTGGGTGATCGCTTGAACCTAGGAGTTCAAGACCAGCCTGGG
CAACCTGGCAAAACCTTGTTTCTACAAAAAGTACAAAAATTAGCCAGGCATGGTGGTGCA
CACCTGTGGTTCTAGCTACTTGGAAGATTGAGGTGGGAAATTTGCTTGAGCCTGGGCTGT
[C,T]
GAGATCACAGTGAGCTGAGATTGCACCACTGCACTCCAGCCTGGGCAGCGGAGTGAGACC
TTTTCTCAAAAAAAAAAAAAAAAAAAAAAGGCAAAAAATTAAATTATTAGTATGGTAAAGTTT
CGTTTGGACTTAATATGAAACTCATTTCTAGAAATGATGATCATTTGCATAGGGCTTAAC
TTCCTTTGCTAAGAAAATAGAGTAGTATACTAGGAGACTTCCAGAGCTGCATAGAGCTTC
AGGGTCATCTACCAAGACAGACAATTTGTTGTCATCATCAGTGTTAAACTCTAAATTATT

86175 ACTGACTAAAATACATATAATTTTTCATAATACTTTAAAATGTAAGAAGGCAAAAAATTTC
TGGGCTCAAGGTGGGTGATCGCTTGAACCTAGGAGTTCAAGACCAGCCTGGGCAACCTGG
CAAAACCTTGTTTCTACAAAAAGTACAAAAATTAGCCAGGCATGGTGGTGCACACCTGTG
GTTCTAGCTACTTGGAAGATTGAGGTGGGAAATTTGCTTGAGCCTGGGCTGTCGAGATCA
CAGTGAGCTGAGATTGCACCACTGCACTCCAGCCTGGGCAGCGGAGTGAGACCTTTTCTC
[A,-]
AAAAAAAAAAAAAAAAAAAAGGCAAAAAATTAAATTATTAGTATGGTAAAGTTTCGTTTGGA
CTTAATATGAAACTCATTTCTAGAAATGATGATCATTTGCATAGGGCTTAACTTCCTTTG
CTAAGAAAATAGAGTAGTATACTAGGAGACTTCCAGAGCTGCATAGAGCTTCAGGGTCAT
CTACCAAGACAGACAATTTGTTGTCATCATCAGTGTTAAACTCTAAATTATTAAGTGCTT
ATGTGCCAGATACTGAAGTTTATATACACTTTCTCTAATCTTTAATAATTCTAGAAAGGT

87109 AAAAGATTAAACATATCTATGGTTTTATAAATGATTATAAAATAAATACCCAGTAACTAT
TATCCAGGTCAGCAAATATTCTACTAGTGTATGAGTCAATTTCCATGGCAAAAGAACTAA
GCTTAGGCACTATACTCAAAAAAACTAAAAATAAAATTTTTCTAAATGTGTATTATATCA
ATGGAATAAATACAAATATAACTTACCATGTCATAATTCCCCCCACGCTTTCCCTTCTTT
TACAGCATGGGTAGGTTCTCTCTCCATGGGGATGATTTTCTTTTGCTGCCCAATAGTCAG
[C,T]
GTCTTCACAGACCTATTTGGTTGTCGGAAAACAGCTGTCGTGGGTGCTGCTGTTGGATTT
GTTGGGCTCATGTCCAGTTCTTTTGTAAGGTAAGGACTTGGTTTTTTCATGTTGCTTTTT
AAAAACTGTTAGATACCTTAAAGTTTTACTTTCAGAAACTATGCTATTTACAAGCAAAGA
TCCTCCTTTTTCATTTTTTAAAACTTTAAGCAATATGACTTATAAAACAAACTGTTATCCA
TAGCAGCAAATCAGAGCTTGAGAATTTGAATGCTTTTTTTTCTTGTAATGCCTAAGACTT

89444 ACTTATGTAATCTACTACCTAGTTTGTTAACAAAACACACATACAAAGCAATGTTTTTCA
AATTTTTCTGACCACTGAGCAATAAAAATTATGACATATATTTTGATGTGACCCAGTTCT
GTCTCTCTTTCTCTACCCTCTAAGTGAAACAAAATTTATTGAAACCAAAATTCCCTTACT
ACATGTAATATTCTCATATATTCTATTAAATTTCGTTATTTAGCTTGCTGATCAAAGGCT
ACTGAAACTTGAGAGCAAGATACAGGAGCAAGGGGAAATGTGGTATAGATTCTGAGTGTC
[A,T]
AGTGGCAGGTCCATTTTTTCCTCTAGCTCCAGTTCTGCCTTCTGAGGAAAACCTTCTCCA
ACAACTTAGGTCAATCACACCCATGTCCCTTCTCTGAATCCTTTTTGCACATATGATTGG
TATCCGACAGCCTTACTCATTTACATTGCACTTATTTGGCTGCCAAACGTCACAAACTGG
AACCCATGTGTTACTGAAGGGAAAACCTGGAAGTGAAAAGGGTTCAGCAGTAGTGCAAATA
CCATCATAAAGCTCATATACTTCACTCTGCAGGAGGGAGAAGCTCTGTGGTTTTCCAACT

90535 TTTTTTTTTTTTTTAAATAGAGATGGGGTTTTTGCTATGTTGCCAGACTGGTCTCAAGCCAT
CCTCCTGCCTTGGCCACCCAAAGTGTTGGGATTACAGGTGTGAGCCACCACGTCTGGCCA
AGGACCAGATTTTTAATATTCTTTTCCACAATGTATCCTGGTACACAGTAGTTGCTTAATA
TGTTGGCTAAACAAAGAGTGGAGATTCAGTAAAGGGTGATCAGAGTGAGGTGAGATTAAT
TTGGGAAAGCCTAGAAGTGATTCTTGAGCCTGATTTGAAGGTGGTGCTAGCTGTGGATTA
[G,A,T,C]
TAGAGGGAGGAAGGGCATCTCAGAGAGAGGATTGCCAACATGCCTTAATTTTATCAGATTC
TAGAGTTCCTTATGATTACCTCAGCATGTTGCTAGACTAGCATTATTATCCAAAATTTTA
ATTATTAACCAACTTTAATCTTACTTTCTAACAAATTGTTTGCTTTTACTACTGATAGCC
TTTTCAAAAAACTTTAACTAGTTTTATTCCTTACCATAATTGTTTCAAAGAACATAATGA
TATGATCCTTTATCTTCCTAAGAAATGTGCAATTATTTGGTTAAACTGTAAGATTATTTA

91163 GCCTTACAGCTTACAAACTGGGATCACTAAAGGAATACACTTAATTTAAGTCTTTCTGTA
GTCAGAATATGATTTCTTGTTGTCTTGCACAATACTGAGAACAGTGCAGTACAGGGCGAA
GGTTGGTCTACAGCCCCTTAGGCCAGCAAAAACAGGCACAACTGCACCTCTGTGCAAATGT
TCCTGACATAACCTTGGGGAAAAAATATAAAATGCGGCCTTTTCTTTTACTACCTTGTTT
GGTAAGTACCTGGAAAAACTCCATGAAATAATTAGATTTCATAGTTAATTCTAACTTTTT
[T,A]
AAAAAAATGTTTCATTGAGACTAGGTTTTTGGTTTGTTAATTGAATCACTGTTGATTTTAC
CCTTCCTGGCACCAACCTTTATTTCTGAGCTGTGGAGAGCACAGTTCTCACTCAGTGCTG

FIGURE 3-51

TGTGCGTCACCTGAAATCCACAGAAAGAGGTGGCTGAACAAAATCACTGATGACCTTAAT
GGTTATTTTTCACATATTCAGATTAAATTAAAATACGTTTAGTGCTACATGCTTGACTTA
CTGAGTTTTTCCCTCTATTTTGGTTAATTTTTTTTTTTTTTGGTTAACTTTTACTTGTAG

93488
CTACATCCTGATCTGATAGTCCATTTTCATACTATTAGGAAAGTATAGCCGAACCAACTT
AAGGTAAGTTTCCTGGAATATAGATCTGTTGTGACAGGATTAACTTTACCATCCAACCTC
TTTCATAGCTTCTGTAGTCAAGAGAACATTTATTGTGTCCTTTCTTAAAAAGATGAGTAG
AAATTCTTTTTTCTTTTTTTTCTTTTTTCCAGACAGGGTCTTGTTAAGTTGCTCAGGCTGG
CTTCAAGCAACCCTCCTGCCTCAGCTAGGATTACAGGTGCAAGCCACCACACCCAGCTTT
[A,-]
AAAAAAAAATTCTCTTTGGTACTACCACATGAACACACCTAGAGAAATCATAACTCAGCT
TTGCTAATACTAGACATTTACCAAAGGAAAGTGGTAGATGACTGTCTAGTTATTTTTGG
TTATATATTTATAATTTGTAAATTAATTTCACATATATTACTTCATTTGACTTTCACAAT
AAACCAGTAAAGCAGATAAAATAAATATTAGCTCCAATTTTACAGACTGAAAAACAGATC
TATTGTTAATAGAGACGTTAAGTGATTTTTCCAAGAATTACATGTCAGTAAACAGCAGAGC

96065
GCATAAAAATGGGAGTTATTTTAATGTAAGGCAATGTGATTGCCAACTTGAGATAGAAGT
AAATTTTGAAAGGAGAAAGATAATACCCATTTGGAAAGTGGTTTTAAAAAGTTTCATAG
CATTGGAGTTGGGCCTTGAGCATGAGATTTTGTGTACAAATCTGATCTTTGATCAACTAG
GGAACTAACTTACCAGTTTAGGTCTTTGAAGATTCAGAAATACAATGGAGTGCTCTCATT
GCTATGTTAAAAATTCTAAGATCTTATTAGATTGTACATGATGATTTGAGAGAGAATATG
[T,C]
ATGCTTGCTTTCAAAGTGAGGTTGGAGGTTTGATCTTCTCGTAGTTGACGTTTCAAAAAG
AAGAATTAGATTGCCTCCTCGAAGCTAAATTTACCTTTCTTTTAGGCCTTCCCACTTAAA
ATCTTTTTTAGAAGGATACAAATCTTATAGATCAATTTAGATGAGGCCTAACTTTCTAAA
AACGATTCCTAGTAGCAGCTGCATCAGTTTTTATGAATTGCCCCTTTTGCCTGAGAGTTG
TTTTGTTTTGTTTTCTGGAATCTTTTTTTGTTTTGTTTTGTTTTGCTTGTTTTTGTTTTT

96351
TGAGAGAGAATATGTATGCTTGCTTTCAAAGTGAGGTTGGAGGTTTGATCTTCTCGTAGT
TGACGTTTCAAAAAGAAGAATTAGATTGCCTCCTCGAAGCTAAATTTACCTTTCTTTTAG
GCCTTCCCACTTAAAATCTTTTTTAGAAGGATACAAATCTTATAGATCAATTTAGATGAG
GCCTAACTTTCTAAAAACGATTCCTAGTAGCAGCTGCATCAGTTTTTATGAATTGCCCCT
TTTGCCTGAGAGTTGTTTTGTTTTGTTTTCTGGAATCTTTTTTTGTTTTGTTTTGTTTTG
[C,T,G,A]
TTTGTTTTTGTTTTCGTTTTTTTTTGAGACGGAGTCTTGCTCTGTCTCCCAGGCTGGAGT
GCAGTGGTGCAATCCCGGCTCACTGCAACCTCTACTTCCCGGATTCAAGTGATTCTCCTG
CCTCAACCTCCCTAGTAGCTGGGATTACAGGCGCCTGCCACCACACCTGACTTAATTTTT
TGTATTTTTAGTAGAGACAGGGTTTTGCCACATTGGCCAGGCTGGTCCCGAACTCCTGAC
CTCAGGTGATCCACCCATCTTGGCCTCCCAAAATGCTGGGATTACGGGTGTGAGCCACCA

96701
CAGGCTGGAGTGCAGTGGTGCAATCCCGGCTCACTGCAACCTCTACTTCCCGGATTCAAG
TGATTCTCCTGCCTCAACCTCCCTAGTAGCTGGGATTACAGGCGCCTGCCACCACACCTG
ACTTAATTTTTTGTATTTTTAGTAGAGACAGGGTTTTGCCACATTGGCCAGGCTGGTCCC
GAACTCCTGACCTCAGGTGATCCACCCATCTTGGCCTCCCAAAATGCTGGGATTACGGGT
GTGAGCCACCACGCCTGGCCTCTGGGTTTCTTTTTTTTTTTTTTTTTTTTTTTTTCTTTTT
[T,C,A]
ACGGCTCCTCTGACTCCTCTCATTTAGCTTTCAGGAGCATAAACTCTCTTGGTTTTCTGC
CTACCTCCACATCACTCCTCCTTAGTTTCTTTGCTCACTTCTTCTTTTTCCCACTGACCC
CTGAATATCAGCATGTCCTAGGGCTTGTCCCCTGATCTTTTTCTCCATGTATTCTACTGG
TGGTTTCATCCAGTCTCCTAAGTTCATACATCACGTATATGTCAATGACTTCAAATTTAT
AATTCTGGTCCAGACCTTTTCCCTGAATCCTCCACCAGAGCTGTATATCCAGCTGCTTAC

96879
CCGAACTCCTGACCTCAGGTGATCCACCCATCTTGGCCTCCCAAAATGCTGGGATTACGG
GTGTGAGCCACCACGCCTGGCCTCTGGGTTTCTTTTTTTTTTTTTTTTTTTTTTTTTCTTT
TTAACGGCTCCTCTGACTCCTCTCATTTAGCTTTCAGGAGCATAAACTCTCTTGGTTTTC
TGCCTACCTCCACATCACTCCTCCTTAGTTTCTTTGCTCACTTCTTCTTTTTCCCACTGA
CCCCCTGAATATCAGCATGTCCTAGGGCTTGTCCCCTGATCTTTTTCTCCATGTATTCTAC
[T,-]
GGTGGTTTCATCCAGTCTCCTAAGTTCATACATCACGTATATGTCAATGACTTCAAATTT
ATAATTCTGGTCCAGACCTTTTCCCTGAATCCTCCACCAGAGCTGTATATCCAGCTGCTT
ACTTAAACATCTCCACTTGGGTAACTGCTAGGTGTTTCAGACTTACCCTGTCTAACCCTGA
GGTCTTGATCTTACCCCTTAAAACTTACTCTGCCCCCAGCCATCCTCATCTCAGGAGCTG
GCAATTCCGCCCTTTCAGTTGATCAGACTCAAAACTTTGGAGTCATCCTTGGCTCTTCTT

97648
TTCCTTCTCTGCCCCGCGGAGTTTGTTCTCTATGAAGAAGCCACAGGCATTCTTTCTAAA
CATAAGTCACTCTGCTCAGAATCCTTCAATGGCTTCCCATTTCCCTAAGAGTAAAAACCA
ATATCCTTACAGTGACCTACAAGGTCCTTCACAATCTGGCCCCCCACTACCTCTCGGAGCT
TCCATCGGCTGTCCCTTGCCCACTCTGCTTCTGCCATTCGCCTTTTTAATGGGGCTCACTCT

FIGURE 3-52

```
GACTACCTGCTTGAAACTTCCTGCGTCCCTTTTCCCCTGAGTATTCACAAACCGCTCCTA
[G,T]
TACTCCTTTTCTTTTTTGTAGCACTTAATACTTTCTAACATTATCTATTTTACTTCTTT
ATTGTAGTCATTGCTTACTATCCGTATATTTACACGTCTGCTAGAATGTAAACACCACAA
GGGTAAGGATCTATTTCATTCAGTGGTAGATCCCAAGCATCTAGCACAGTGCCTAGCACA
CACTGGGTGCTCAAATATTTGTTGAATGACTAAATATATTCTGGGTGAGTCTGAAGTGAC
ACTGTATAAGTAATGTTCATTTTTTCATCATTTGGATCTTTAAAATTCTCTACTTTGATG
```

97814
```
TACCTCTCCGAGCTTCCATCGCTGTCCCTTGCCCACTCTGCTTCTGCCATTCGCCTTTTA
ATGGGGCTCACTCTGACTACCTGCTTGAAACTTCCTGCGTCCCTTTTCCCCTGAGTATTC
ACAAACCGCTCCTAGTACTCCTTTTTCTTTTTTTGTAGCACTTAATACTTTCTAACATTAT
CTATTTTACTTCTTTATTGTAGTCATTGCTTACTATCCGTATATTTACACGTCTGCTAGA
ATGTAAACACCACAAGGGTAAGGATCTATTTCATTCAGTGGTAGATCCCAAGCATCTAGC
[A,G]
CAGTGCCTAGCACACACTGGGTGCTCAAATATTTGTTGAATGACTAAATATATTCTGGGT
GAGTCTGAAGTGACACTGTATAAGTAATGTTCATTTTTTCATCATTTGGATCTTTAAAAT
TCTCTACTTTGATGCTATAATGATTTTTTCACATTCTGTACTTGCAGGACATGGTGTTATT
AATATTTATTCAATACTTATTCAACAAATAAGCTCAAACTAAGGAAACCTCGGAATAATT
GAGTAACCAGTAATGCTGTCCGTTGATGGAGGAGAGAGTTGGTGTGTTTTGCTCTGATTC
```

98430
```
GAAATTTTAAGATAAATAGAAGAAATTTTCTGGTCCCTCAAGTAACTGTGTCTTCAGTACC
CACTGAAAAATCTCAAAGAGTCTGGAGTGGTGTGTTTAAGAATAGGATGCAGGATGCAGA
ACCATAACCAGGCCTCAGGTCTGCATAGCTTTGGTCGAGCATTGAGCATAGGGCCTCGTG
AGATAACTGATAAATGCCAAATATGACAATGATAAATGCCAAATATGACAATGATAAATG
CCGAAGAATGACAGTGACAATGATAATGAAGTTACCAAAAATGATGGTAACTTTTCTCAT
[C,T]
GGCATGAAATGCTCTATCTCCAATCTGAAGCTGATGATGTAGTTTCAGTTACTCTCATCT
CTCTCCCCTGCTACTCAGATTGAAAATCAGCTACTTAGTACCTGTGTTCTTTGACTCTAG
ACCATATCATTGGGTCAAATTTCAGTTTTTAAATTTTAGATCCACATGGTTCTCTGTCAA
GAAGATGACTGACTCATATTGAAATCTGTAAAATATGTATTCATTAGCCTGTTTTTTAAA
AACTCCCTTATAAGTGGGTTGACTTTGTGGCAGATAGTAATTGACTGTTCTCAAAAGAAA
```

101268
```
CTTGTAGTCACTAACTCTAAGGATCATAGAGCATAAGGGTAAGCAGGCCTTCTTATGTAT
TCATGCTATCAGGAAGGGTCTTTAGCACCCAAACAAAGTTCTAGGGGCTGTACATTGCTG
ATGTGTTAACCCTCAGCTGCCCCATGTAGCATCTATTTACCCCTATGCTTTCCCCACTTTC
TATCCCTATCATTATATCTCTGGCTCTTTTGCCCCTCTCTCCTTGGGCAGCTTACTTGTA
ATTAGAAAGTTTATATTCCCTCATAACATATTGTAAAAGTGCTCATTTAAAGGGCAATGC
[A,G]
CACCAAATTGGAGGTGTATAATTGCAAACATGGAATCCCTATATCTCTGTTATGCAATCC
CTGTATCTCTGTATCCATGTTAAATTGAACTGATGCTTTTTTTGAAGTAAAATGGTAAGAA
CAGTGGCAACATCTAGTCTTCAGAGCATAGTTTAAGATTTTTGCCCAATCCTCCAACCCA
TGCAATGGTGTGCTTTGAAAACCACAGGTTTCTTTTAGACAAATACAACATTTATTTCCC
GCATTTCTTTTTGATTTAACATTTTAGTTAACATTTTTATTAACATTTTAGTCTACAAGA
```

103881
```
ATGGTAAGAGATGGTAAGAGACAACTTTGGCCAGTCAGGGACAACCTCATTGAAAAGCTG
ATAGTAAGTACATCCTTTGGGTAAAGGGTAGTATAAGGTACTTTGAAGGTACAAAAATAA
GACAGCTTTCTATTGCCCCTTGGGGAGGCCTATAACAGAATTTCTCAAGTCTCTAAGGCCAA
TCAAGAGTTGGATTTTTTTATCCAACTTATTTTTAATTGATGTATTATTAAAAATCTGCA
TATCAAAAATGAAAATGTCTTGCATACTTTGCTGTAGGACCCAATCATTGTTTTTTTCTTC
[A,G]
TATACTGCATTAATCTGTTTTTCACACTGCTAATAAAGACTTACCTGAGACCAGGTAATTT
AGGAAGAAAAAGAGGTTTAATGGACTTAAAGTTCCACATGGCTGGGTAGGCTTCACAGTC
ATGGTGGAAGATGGAGGAGGATCAAAGGCATGTCTTACATGGTGGCAGGCAGGGGAGTAT
GTGCAGGGGAACTGCCCTTTATAAAACCATCAGATCACATGAGACTTATTCACTGTCACG
AGAATAGCACAAGAAAAACCTGTCCCCATGATTTAATTACCTCCCACCAGCTTGCTCCCA
```

103926
```
CTCATTGAAAAGCTGATAGTAAGTACATCCTTTGGGTAAAGGGTAGTATAAGGTACTTTG
AAGGTACAAAAATAAGACAGCTTTCTATTGCCCTTGGGAGGCCTATAACAGAATTTCTCA
AGTCTCTAAGGCCAATCAAGAGTTGGATTTTTTTATCCAACTTATTTTTAATTGATGTAT
TATTAAAAATCTGCATATCAAAAATGAAAATGTCTTGCATACTTTGCTGTAGGACCCAAT
CATTGTTTTTTTCTTCATATACTGCATTAATCTGTTTTTCACACTGCTAATAAAGACTTACC
[C,T]
GAGACCAGGTAATTTTAGGAAGAAAAAGAGGTTTAATGGACTTAAAGTTCCACATGGCTGG
GTAGGCTTCACAGTCATGGTGGAAGATGGAGGAGGATCAAAGGCATGTCTTACATGGTGG
CAGGCAGGGGAGTATGTGCAGGGGAACTGCCCTTTATAAAACCATCAGATCACATGAGAC
TTATTCACTGTCACGAGAATAGCACAAGAAAAACCTGTCCCCATGATTTAATTACCTCCC
ACCAGCTTGCTCCCATGATATGTGGGGATTATGGGAGCTACAATTCAAGATGAAATTTGG
```

<div align="center">

FIGURE 3-53

</div>

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107845   ACCTTCTCTCCTTCACTTTGTCCCTACTTTTTCTCAGATTTTTTTCAATGATGTCTATGC
         TTTTCTTGTTTTTTTCTAGCTTTTCTAACCTTGCATTTATTTTCCTTCAGATCTCAACAT
         CTGCTGCAATTTGACTGTTCAGGTTAGTGACAATTTGCCCATTTATCAGTTTTGTGCCTT
         AGGCAGTATTCACCAGCATTCTCCTACTTGAGATGAATAAGGATCTTTATTTATCTGACC
         ACTTGTTTACTCATTCATGGGGACATTTAATATTTACAGAACACTTTCATCAAAACAAGC
         [C,T]
         TGTTTTTTCTTTTCAAAATATAATATACTAGCATAGGAACTTGACAGAAGAGGTAATAAT
         ACAGAAGAAATCTAGAGAACTGATCATGGAGAAATAATTAAACTAAAACAAAGCTGCTGC
         TTATAGTAAGGTAGACCAAGTTTGTCCTGTGTTCCAAATTATACTTAGCCAAAAATAAAT
         ATTTATAGATAATTGAATAGTAGTTTTTAGAAATGATTCATGGATTACTCAGGGGTGGAA
         ATTATCCCTGTAATGTAGGCCCCAAACTTCTAAAATATTTATAATTTGTGAGGGAGAAAT

109010   AGGTTTAAACCTTAAATAATAGAAATAAAAGTGATTTTATAATTATCTAGAGTAGTTTCA
         ATGTGAAATAACTTAAAGGTATGGAAATGGATGCCAAGAAGTATAGTCAGTCTTGCTGGA
         GTAAAATAATGCCCAGTGCTTTGTGCCTTCTCCCAGCTGCTGCTTCCAGAAGAACGGGGT
         GTCTGAGTGTGAACATCACCCAACAAGTAGGTTAACAGATATCCACGGCCCCTCTTGACCC
         ACATACATATCAGTGGGATTTAGAATGCTGCCACATATTGATGATTGAATTTATGAAGCA
         [-,T]
         ATAATATCCTCAATAATAAACCAAGTGTCCCTGTCCCAACTTGTTATCTCTGCTTCTGTG
         AACACATGTTTTCTTTTATATGCTCCTTACTCCTCAGGTGCTCTCTCAGGGACTTTTCAG
         TTCCTGACCTTGTCCTTTTCAGCATTTTCTCAGAGGACAATTCTTAGCTTCCTGTTGATT
         CCTCAAGCATTAATTGCTTTTTTCTGCCAGATATTTCCTTGCTAGGCTCTTGAGCCCCTCA
         GAGCTGTTCTGAATTATGCAGTGGGAATTGCCCAGGATTAGGAATCACCTAATGTCCCCA

109623   CCTTGTGAGGCACTTCTCAACTCTGCATCCCTTATACCTTCACAGCAACCCTGTGTACCC
         AAAGCAGTGTCATACTCGGTGCCTCCTTTTCTCTCCTGAAATAAAATTCCTAGATAAGAA
         GACCTCTATATTCCAGGCCTTGTCTTTGATTTTAGGGAAAAAAAGAAAACTACCTATAT
         ACATAATGTTTTTAAAAATCAGTAATGTCCCACTCGTTACAGAAAGGAGAAATAAAAGAA
         GTAAGTTAATGCCTGGGATACGTGCTACAACATGGATGAACCATGAGGACATTACACCAA
         [G,A,C,T]
         TGAAATACTCCAGGCACAAAAGCACGAATACTGTATGGTTCCGCTTAGATGAGGTACCCA
         GAGAAGTCACATTCATAAATACTGAAAGTTGTATGGTGGTTTCCAAGGGGAGGGGGAAAT
         GAGGAGTTATTTAATGGGCACAGAGTTTCAGCTTGAGAGGAGGTGGTGACAGTTGTACAA
         CAATGTAAATGTACTTAATATAGTACACTTAAAATGGTTAAAATGGCAAATTTTATGAAA
         TAGGAATTTATCACGATAAAAAATTAAAAAGTAAGAAAAGTTACTGCTTGGGCGAAAGTA

110188   TAAAAAGTAAGAAAAGTTACTGCTTGGGCGAAAGTATATCAAAAAAATAAAAATAGTCCC
         CACAAATTTCCAAAACAACCCTAATGAGGTGTTGCTGCCTAAATGGTGAACCAAATTGTG
         AACCAATGTGTAGTGTTTGAGACTGGGAAACTGATGCCCAAGATTTTAGCCTCAATAAGG
         AGTAGAGTTCATAATTTGACTCCAAAGACATTTCTTTCCCTACCATGCCAAGGCCATCTG
         ATTCCCAGTCCAAAGAAGTTTTCTCTCTGCTCTGTAGGCTGCCTTAATCCAGAGTACACA
         [A,T,C,G]
         GCCTTCCATTTTCTTATCTGTCCTCCTACCAGGGTGTGGTCCTTTTCCTCCTGAACACTG
         ACTGTATAATTACCAGACAAAACTAAACATATTTAAAATATAGGCAGTCCTCTACATCCA
         AGGTTCCACATCCTTGGATTCAACCAACCATGGATTGAAAATATTTGGGGGAAAAAAAA
         CAATAAAAAAACACTGGCCTGGGCAGCATAGTGAGATGCCATCTCTACAAAAACATTAAA
         ATATTAGCTGAGCATTCCAGCACTTTGGGAGGCTGAGGCAGGCAGATCACCTGAGGTCAG

111006   AAAAATAAAAATAAATAAAAATTAGCTGAGCATAGTGGCATGTGCCCATGGTCCCAGCTA
         CTTAGGGGGTTGAGGTGGCAGTGAGCTGTGATCGTGCCACTGCACTCCAGCCTAGGCAAC
         AGCGAGACCCCATCTCAAAACAAAAACAATAAAACAGAACACAGATTAAAAACAAAATAC
         AGGCTGGGCTCACTGGCTTATGCCTGTAATCCCAGAACTTTGAGAGGCCAAGGTGGGAGG
         ATTGCTTGTGCTCAGGAGTTTTAGATCAGCCTGGGTAACACGGCAAGACCACATCTCTAC
         [C,T,A]
         AACAACAACAACAGGAGACTATACTTTCAGGGACCATTTCTGGGGATCATAGTTTGTTAC
         TAGAGAAGTTTCTCTGTGTAGAGCATTGAAATATAAAAATGCAGAATAATCATTTACATA
         GCATTTACATTGTATTGGTTATTATAAGTAATCTAGAGATTAATTAAAGTATACAGGAGG
         ATATACATAGGTTACATGCAAATACTACACCATTTTATATAGGGGACTTGATCATCCATA
         GATACGGGTATCTGAGGAGGTGTTGGGTTCAGTTCTCCACGGATACCAAGAGACTAATGT

111223   CTTTGAGAGGCCAAGGTGGGAGGATTGCTTGTGCTCAGGAGTTTTAGATCAGCCTGGGTA
         ACACGGCAAGACCACATCTCTACAAACAACAACAACAGGAGACTATACTTTCAGGGACCA
         TTTCTGGGGATCATAGTTTGTTACTAGAGAAGTTTCTCTGTGTAGAGCATTGAAATATAA
         AAATGCAGAATAATCATTTACATAGCATTTACATTGTATTGGTTATTATAAGTAATCTAG
         AGATTAATTAAAGTATACAGGAGGATATACATAGGTTACATGCAAATACTACACCATTTT
         [A,G]
         TATAGGGGACTTGATCATCCATAGATACGGGTATCTGAGGAGGTGTTGGGTTCAGTTCTC
         CACGGATACCAAGAGACTAATGTTAATTTCATTTCCCCAACCTCCACACCAGAACTCTGA
```

FIGURE 3-54

AATAAGAATAAGAAAAGGAGCAGTTGGGATAGACAATATCAGAAGTATGTGGAAATGATA
ACAGTGGAAGGAAAGCTGATCTAGGCCTACTCAACAAATTTTAATCTTCATTCTGGTAAA
AACAAATTAGATTTATGGGTGCAAATTTTGAGCCAGCAATTAGATGGCTCTTAGGATTAAT

111457 ATCTAGAGATTAATTAAAGTATACAGGAGGATATACATAGGTTACATGCAAATACTACAC
CATTTTATATAGGGGACTTGATCATCCATAGATACGGGTATCTGAGGAGGTGTTGGGTTC
AGTTCTCCACGGATACCAAGAGACTAATGTTAATTTCATTTCCCCAACCTCCACACCAGA
ACTCTGAAATAAGAATAAGAAAAGGAGCAGTTGGGATAGACAATATCAGAAGTATGTGGA
AATGATAACAGTGGAAGGAAAGCTGATCTAGGCCTACTCAACAAATTTTAATCTTCATTC
[T,C]
GGTAAAAACAAATTAGATTTATGGGTGCAAATTTTGAGCCAGCAATTAGATGGCTCTTAGG
ATTAATAAAAAAAGACTGAACATCATGCCTTCCAAAGACTGAGGGAAAGAGATAGATAGG
AGACTTTGGCAAAGTAGCACTTTAGCCAACATCATTAGCCTAAATCTTAGTGAAGAGAGG
TTAGAAGAAAGGTAGAATTTTCATGGAAGGATCCATTTTTCTTCACTTCAGAATTAAGGG
AAAAATTAGGAAGCTGAATAAGAACTAATGGCCTAATTTCTTTGTTTCTTTCAAAAATCA

112168 CAAGTTACCTCAGATCCCAGTGATTTAAATAATGCTTTCTGAATGTATCCTTTTCTGTTT
TAAGAAGAAGCTGTATTAGGTTCTTGTGTTCCTATAAAGAAATACCTGAGGCCGGATGAT
TTATAAAGAAAAGAGGTTTAATTGGCTCACGATTCTGCAGGCTGTATAGGAAGCATGGCC
CCAGCATCTGCTCAGTTTTCTGGTGAGGTCTCGGGGAGCTTTTACTCATGGCGAAAGCAG
AGTGGAAGCAGCAGGTCACTTGATGAAATTGAGAGCAAGAGTATGGGTGGGGAGCTGCCA
[T,C]
ACTCTTAACCCAATCTCTAGTGAACACAAGCAATAACTCACTTATCACCAAGGGAATGGT
GCTAAGCCACTTGTGATGGATCCACCTCCAAAATCCAGTCACCTCCCACCAGGTCCCACC
TCCAACATTGGGAATCACATTTCAACATGAGATATGGAAGGGACAAACATTCAAACCATA
TCAGAAGCCTATCTTAGGCTGGGCACGGTGGCTCACGCCTGTAATCGCAGCACTTTGAGA
GGCCGAGGCAGGCAGATCATTTGAGGTCAGGAGTTTGAGACCAGCACGGGCAACATGGTG

112653 AAGCCTATCTTAGGCTGGGCACGGTGGCTCACGCCTGTAATCGCAGCACTTTGAGAGGCC
GAGGCAGGCAGATCATTTGAGGTCAGGAGTTTGAGACCAGCACGGGCAACATGGTGAAAC
CCCATCTCTACTAAAAATACAAAAACTAGCTGGGCATGGTGGCACACACCTGTAATCTCA
GCTACTCGGGAGGCTGAGGCAGGAAGCTCTCTTGAACCCGTGGGCAGAGGTTGCAGTGAA
CTGAGATTCTGCCACTGCACTCCAGTCTGGGCAACCGAGTGAGGCTCTGTCTAAAAAAAA
[G,-]
AGAAGCCTATATTAAACTTATAAAATTTAATATCATTTCAACTAGCCTTTTGTTGGGTGC
ATTTGTTCACTTTGGACTATTTTTTCCAAATTCATGTACAGTCGTGCATCTCTTAACAATG
AGGATATGTTCTGAGAAATGCATCCTTAGGCAATGTCATTGTTGTGCAAACATCATAGAG
TGTACTTAGACAACCCTACATGGTGTAGTCACTACATACCTAGGCTATATGGCATAGGTA
GAGCCTATTGCTCCTAGGCTACAAACCTGTACAGCATGTTACTGCACTGAATGCTGTAGG

114155 TAAAAATTTAAATAAACTAACAGATTAAACCTTTCATTGTTCAGGAAGGAACAGAACAAT
TTTTGATAACTTGTGAAATATCTGGCACAGAAATTATTTAGAGCCACTAAATAATTTCAA
ATTACCTAAAAATCCTAGTGATTTATTTTCTATTTTAAGATGAAGTCTACTTTAAACTTC
TAAAATGCAGGGTTATTTAAACTGGCATCTAAATCCAAGCTGGTTTTGGTTGGTAATTCC
TCTAGGACATTTTACTAAATCTTGATCTTATCTAAATGATGCTATGTCATAGATGGACTG
[-,A,T]
TTGTTTTGTTTGTAATCCAGGGAAATTAAAAAAAAAAAAAAAACAAGTAGAAATAAAGGCT
TTTAAAGAATTTTTAGAGTTAGAAATGTTTTTCAAAATTAGGTTCTTTAAACCATTAGCCA
TCTCTTCCTTCTGAACTCTTCTTTTTTCTGCCCTTTGGTAGCTATGAAATAATCTGCATT
CCAGAAACTTCTTTTTTTCCCAGTCCTTTTTTCATGTCTTAACAGTGCCATGCATGATTATC
TACACCATGGAAACCCATCTTAATGAAATGGAAAGATCTGCTGTTTAAAAAAACAAACAA

114181 AAACCTTTCATTGTTCAGGAAGGAACAGAACAATTTTTGATAACTTGTGAAATATCTGGC
ACAGAAATTATTTAGAGCCACTAAATAATTTCAAATTACCTAAAAATCCTAGTGATTTAT
TTTCTATTTTAAGATGAAGTCTACTTTAAACTTCTAAAATGCAGGGTTATTTAAACTGGC
ATCTAAATCCAAGCTGGTTTTGGTTGGTAATTCCTCTAGGACATTTTACTAAATCTTGAT
CTTATCTAAATGATGCTATGTCATAGATGGACTGTTTGTTTTGTTTGTAATCCAGGGAAA
[-,T]
TAAAAAAAAAAAAAAAACAAGTAGAAATAAAGGCTTTTAAAGAATTTTTAGAGTTAGAAAT
GTTTTCAAAATTAGGTTCTTTAAACCATTAGCCATCTCTTCCTTCTGAACTCTTCTTTTT
TCTGCCCTTTGGTAGCTATGAAATAATCTGCATTCCAGAAACTTCTTTTTTTCCCAGTCCT
TTTTCATGTCTTAACAGTGCCATGCATGATTATCTACACCATGGAAACCCATCTTAATGA
AATGGAAAGATCTGCTGTTTAAAAAAACAAACAACCAATCACCCATGCCTCCTACAGTCC

114183 ACCTTTCATTGTTCAGGAAGGAACAGAACAATTTTTGATAACTTGTGAAATATCTGGCAC
AGAAATTATTTAGAGCCACTAAATAATTTCAAATTACCTAAAAATCCTAGTGATTTATTT
TCTATTTTAAGATGAAGTCTACTTTAAACTTCTAAAATGCAGGGTTATTTAAACTGGCAT
CTAAATCCAAGCTGGTTTTGGTTGGTAATTCCTCTAGGACATTTTACTAAATCTTGATCT

FIGURE 3-55

TATCTAAATGATGCTATGTCATAGATGGACTGTTTGTTTGTTTGTAATCCAGGGAAATT
[A,T]
AAAAAAAAAAAAAACAAGTAGAAATAAAGGCTTTTAAAGAATTTTTAGAGTTAGAAATGT
TTTCAAAATTAGGTTCTTTAAACCATTAGCCATCTCTTCCTTCTGAACTCTTCTTTTTTC
TGCCCTTTGGTAGCTATGAAATAATCTGCATTCCAGAAACTTCTTTTTTCCCAGTCCTTT
TTCATGTCTTAACAGTGCCATGCATGATTATCTACACCATGGAAACCCATCTTAATGAAA
TGGAAAGATCTGCTGTTTAAAAAAACAAACAACCAATCACCCATGCCTCCTACAGTCCTG

115964   GTAGAGGGGTTGTTTTGCTCAGTTCTGCCTAGAAGACAGTTGTAGTTATTTTAGTCCCAC
          AGTCTCTACTCCTCCCTGGGCCTGTTTTTGCCCTGCTTTCCTGGCCTCTGTATACGGCCT
          TTGTTAGCACTTTGTAGTTGTCAGTCAGCTGTTACTCCAAGTCCTCTGTCAGAAATAAAG
          TTACTTTTGTTTGAAGAGTCTCCAGTAATCCCCCTTCTTTTTAAACTATGACTCCCCAAA
          GATATATAGTCTAACTTGTGTGCACCAGTATTTTATCATATTTATTTAATAAATTCCATA
          [A,C]
          ACCTTACATAAAAGATATTAAACAAAAAGTACTCACCCCCTTAAAAGGAGGAAGATAATG
          ACCATCAAGGCATGGCCAAATTACACAGTCTTAGGAAACAGTACAGTAGGTAATTATTGG
          ACCTTTTTGATTAATGGCATCCTTGCTTTTGCAGGTGTGTACCACCACTGCACTTCACAGG
          TTTCTGTAAATAAAGTGATTTGGGGTTCCCTTCTGTTGAGCATTCTTCTATCGTGAAACC
          ATTTGGTGATGAGAAGCTTGAGTTTCTAATGCATGTTCGTTGGCTTTATTGGAGCTGCTT

118100   GTGGTGGCTCATGCACTTTAGGAAGCCGAAGCAGGCAGATCACTTGAGGTCAGGAGTTTT
          GAGACCAGTCTGGCCAACTTGGTGAAACTTCATCTCTACTAAAAATACAAAAATTAGCTG
          GGCGTGGTGGTGCACACCTGTAATCCCAGCCACTCTGGAGGCTGAGGGAGGAGAATCGCT
          TGAACCAGGTAGGTGGAGGTTGCAGTGAGCTGAGATCACACCACTGCACTCCAGCCTGGG
          CGACAGCGAAACCCCATCTCAAATAAATAAATAAATAAATAAATAAATAAATAAAATAAT
          [-,A,G]
          CCCCTTCTAGTTGAAAAACTAAGTTCCTACCTAAGCATAATTTGGATTTACCCAATTTAT
          CTTCTTTCAAAATACCTCAAACATTTCACCTTATTATTCTTTTTAAGGATTACAAAGTAG
          AGCAGGGGGGAAATAATAAACCACTAATAAAGAATAATAGCCATTTGACAGACAGGTGTT
          CTTAGTTTCATAAAAAAAAAGATGCCTGGTAGATTCAGTCTTTTATGAATACTAAAGAAT
          GCCTCTTATTTTTGTTTGTTGGAGACAGGTTCATTTTGAACCTAACCTGGTGTTCTCAGG

119631   GTAGGTAATAAAGGTACAAAGATAGATTAGCAACAGATTACGGAGAGCTTTGAATACCAA
          TCTAAGGAGTGTAAATGTAGGCAGTGGGCCACCTTTGAATAAGGAATTGATGAGATTAAA
          GCCATATTTAGGAGGATTATTCTGGACCAGTATGAAAACACAGAAGTTAGGGAAAACAGT
          TAATAGTTTTGAAAGAGAAGAGAAAAAGGAGATGGTGTTGGGATACATAAATGGGCTTTT
          AAAATGCAAAATGAGAAGTGTTTTAAAGAGATATCACCCAGAAAGTCTATGCACTGCCAC
          [A,G]
          TGGGCACTATATGGGTGGTTGTATTTGGTGGGAAATTTGCTTGCAGACTTCCAGAACTCA
          GACCAATGTGTGGTGTGTGGGGACGGTGATTGTCAGGCATTATGGAAAGGTCAAACAAAT
          ATGCTCACTGGCTATCTATGGCCCACAGGTCACTGTAGTCTCTGTTATAAGTACACTAAG
          TGGAGGAGAAAGGTCCTTTAAAAAAAAAGAAAGCTAAAATTAATACCTGATTGTTATTAAC
          TGTGTGCCAAACACTGTTCTAAGCTCTTTACACAGACATTTTATTTAATCCTCGCAACCA

120833   CAGCCTCCCGAGTAGCTGGGATTACAGGCATGCGTCACCACGCCTGGCTAATTTTTTATAT
          TTTTAGTAGAGATGAGGTTTCACCACGTTGGCCAGGCTGGTCTCGAACTCCTGGCCTCAG
          GTGATCCACCCACCTCGACCTCCCAAAATGCTGGGATTACAGGCGTGAGCCACCATGCCC
          GGCCTTAAAAATGCTTTTTAAAAATGAAAACTAAAACATGTTAATTTTTTTTCAAATGTTTT
          CATGAAAATTATCACAGGACAAGTTTCATAAATATTGAAATTTGGAAAAAGTTGCAAGCC
          [T,C]
          ATAACATTGCAGAGAAGCAAATGCATTTGATGCAAAGCCTCAAATTTGTCAAGTTTTTCT
          ACCATATTCAGTGTGGTTTCTTTCTCTTTGGCCTATAGATGAAACATGTAAATGAAAGAT
          TTCAAGATGAAAAAAATAAAGAGGTTGTTCTCATGTGCATTGGCGTCACTTCAGGAGTTG
          GACGACTGCTCTTTGGCCGGATTGCAGATTATGTGCCTGGTGTGAAGAAGGTTTATCTAC
          AGGTACTTTTTTACACCTTTTTTTCCCCTATCAAAAATTACTCTCATCACCCAATGTCTCA

121125   TGCAAGCCTATAACATTGCAGAGAAGCAAATGCATTTGATGCAAAGCCTCAAATTTGTCA
          AGTTTTTCTACCATATTCAGTGTGGTTTCTTTCTCTTTGGCCTATAGATGAAACATGTAA
          ATGAAAGATTTCAAGATGAAAAAAATAAAGAGGTTGTTCTCATGTGCATTGGCGTCACTT
          CAGGAGTTGGACGACTGCTCTTTGGCCGGATTGCAGATTATGTGCCTGGTGTGAAGAAGG
          TTTATCTACAGGTACTTTTTTACACCTTTTTTTCCCCTATCAAAAATTACTCTCATCACCC
          [A,G]
          ATGTCTCATTAAATGTACTTACATGCTTAAATTCTTTTTTTTTTTCTTTCCTTTTTCTTTTT
          GAGATGGAGTTTCGCTCTTATTGCCCAGGCTGGAGTGCAATGGCACGATCTCAGCTCTCC
          GCAACCTCCACCTCCCGGGTTCAAGGGATTCTCCTGCCTTAGCCTCCCAGGTAGCTGGGA
          TTACAGGCGTGTGCCACCACACCAGGCTAATTTTTGTATTTTTTTAGTAGAGATGGGGTT
          TCTCCATGTTGGTCAGGCTGGTCTTGAACTCCTGACCTCAGGTGATCTGCCCGCCTCGGC

FIGURE 3-56

121245 ATGAAAGATTTCAAGATGAAAAAAATAAAGAGGTTGTTCTCATGTGCATTGGCGTCACTT
CAGGAGTTGGACGACTGCTCTTTGGCCGGATTGCAGATTATGTGCCTGGTGTGAAGAAGG
TTTATCTACAGGTACTTTTTTACACCTTTTTTCCCCTATCAAAAATTACTCTCATCACCC
AATGTCTCATTAAATGTACTTACATGCTTAAATTCTTTTTTTTTCTTTCCTTTTTCTTTT
TGAGATGGAGTTTCGCTCTTATTGCCCAGGCTGGAGTGCAATGGCACGATCTCAGCTCTC
[C,T]
GCAACCTCCACCTCCCGGGTTCAAGGGATTCTCCTGCCTTAGCCTCCCAGGTAGCTGGGA
TTACAGGCGTGTGCCACCACACCAGGCTAATTTTTTGTATTTTTTTAGTAGAGATGGGGTT
TCTCCATGTTGGTCAGGCTGGTCTTGAACTCCTGACCTCAGGTGATCTGCCCGCCTCGGC
CTCCCAAAGTGGCTTAAATTCTTCTATAAAAATGAGAAATATTTTCTACAACATAACTTC
TATAGGCAGTTTTTCAAGGACAAAATTAGTTATTTAGTTTGGGTTTTAAACATGAGAAATT

121521 TGCAATGGCACGATCTCAGCTCTCCGCAACCTCCACCTCCCGGGTTCAAGGGATTCTCCT
GCCTTAGCCTCCCAGGTAGCTGGGATTACAGGCGTGTGCCACCACACCAGGCTAATTTTT
GTATTTTTTTAGTAGAGATGGGGTTTCTCCATGTTGGTCAGGCTGGTCTTGAACTCCTGA
CCTCAGGTGATCTGCCCGCCTCGGCCTCCCAAAGTGGCTTAAATTCTTCTATAAAAATGA
GAAATATTTTCTACAACATAACTTCTATAGGCAGTTTTTCAAGGACAAAATTAGTTATTA
[G,A]
TTTGGGTTTTAAACATGAGAAATTGGCAATGAAACAACAATTTCTTTGTTTTGTCGTGGA
ACTCCACCAAACCAGAATGGTTTTCATCCATTGCTTTTTCTATGAAGAATGTTTTTTGGT
GTAGTTCTCATAGTCATGTGCAGATCCTGTGCCCTTTGCATGTCTTATGAAATTTGGTTG
TGTGTGTGACTTTTCAGCTTCTTTACTGCAAATTGCCTCCTCGTGTTTTGGGGTGAGCAT
AAACAAATGCTAATTCCAAGATCATTGCTGACAATCAACAGAACAGGTATTGAAGTGACT

124296 GCATGAAGTAAGTGGAGGACTAAGGAGATGGAAAGGGAGTGGCCAGATAGGCAGGGGGAA
AACAGGGATGAGAGTGTTTCTAGGGGCAGGAGTGGTCAGCAGTGTCAGTAGCTAGTGACA
AAGAGGCTGAAAGGTTTTCATTGAATTTAGAATAGGGAGGCTATGAGTGAGCTTACAGAG
AATGGTTTCTACAGGTGCAGAAAATTGATCATGATCATTTGAACAAATGGAAATATAGAC
AACTTTGTCCAAATGCTTGGCTGTGGAAGGAAGGTAAAGGCAAGCCACAAGGGGGGGTCT
[C,T]
AGGTTTTGAGGATTAAGCCTGTCTAATTATATTATACATGAGAGGCAGTATTTGAGCAGG
GCCTTGAAAAAGAGGTGAAATTTGGACACAGGAAAATGATTGGAAAAGGCATTACAGATA
AAGTTAACTTCCATTAATTGACTTGAAGTAATAACAGTCAACCATTTATTGAGGACTTTC
ATGTGCCAGACAATGAACTAAGGGCTCTACATGCATTATCTCATTGATCCTTGCCCCAGC
CCTTTAAGAGAGAAGGTACCATTGTTATTTCCACTTAGAGATGTGAACACTGAGGAACTG

124549 TGCTTGGCTGTGGAAGGAAGGTAAAGGCAAGCCACAAGGGGGGGTCTTAGGTTTTGAGGA
TTAAGCCTGTCTAATTATATTATACATGAGAGGCAGTATTTGAGCAGGGCCTTGAAAAAG
AGGTGAAATTTGGACACAGGAAAATGATTGGAAAAGGCATTACAGATAAAGTTAACTTCC
ATTAATTGACTTGAAGTAATAACAGTCAACCATTTATTGAGGACTTTCATGTGCCAGACA
ATGAACTAAGGGCTCTACATGCATTATCTCATTGATCCTTGCCCCAGCCCTTTAAGAGAG
[G,A]
AGGTACCATTGTTATTTCCACTTAGAGATGTGAACACTGAGGAACTGAGAGGCTACCTCA
CTGTGGGTGTCTGTGTGTATAGAGGTCCAGGCAGTCACAGGACAGTCTGGTCACACAGCT
AGAAGGAAGTGAAGAGAGTTGGTAATGTGCTGCTTTTAAAAATGTATTTATTGTATCATG
ATCACTTTGTCAGTACTTCACTGTGGACATCCTCATCTAACATTTAGTTTTGTTCTCTAG
TGTCAAGGGAGCCCTCTAATGGACATTTATTGCACTACAGACTTTCAGCTTTCATACATT

124858 TTGTTATTTCCACTTAGAGATGTGAACACTGAGGAACTGAGAGGCTACCTCACTGTGGGT
GTCTGTGTGTATAGAGGTCCAGGCAGTCACAGGACAGTCTGGTCACACAGCTAGAAGGAA
GTGAAGAGAGTTGGTAATGTGCTGCTTTTAAAAATGTATTTATTGTATCATGATCACTTT
GTCAGTACTTCACTGTGGACATCCTCATCTAACATTTAGTTTTGTTCTCTAGTGTCAAGG
GAGCCCTCTAATGGACATTTATTGCACTACAGACTTTCAGCTTTCATACATTCAAAAATT
[G,T]
AGTGCCTCCTGTGCCCCAAGCACCAGCTCAGATGCTGTTAGGGTGATGCAAACAAGACAG
ACATGGTCCCTGAGTTCCTAAAGCAAGCCTGAGGCAGGAAGAAGCCGAATGTGTGTGGAA
ACCCAAGAAGATGGGGAAAGTGGCATGGGAAGGGACTGGAAAGTTAGAGTGGGTCAGATT
AGACAGAGCCTTGAAAGCCAGGATGAAGAGACTTTGCTTTAAGAGTAGTGGATTTTGGCC
GGGCGCAGTGGTTCACGCCTGTAACCCCAGCACTTTGAGAGGCCAAGGCTGGCGGATCAC

125920 TACCCTAGATAGGGCAGACAGATTATCTGCAACATTTTTGGAGCACATTTTAATACCTGA
CTGTTTCCAGTAATTTACAAAAGAAAATATAGCCTTTCCTAACTTGTCCCATGTTGGTCT
GCAGTTACACAGCAGTAAGTTAAAAGTTAGTATTGGGGGGTCAAATATTTCACTTTAGATG
AAAGTTTAGCCACAATCTGGCTTCTGTTAGGCCTTATCTAATTTTTGCATCCAAATGTAG
AGCATCGTTTGTGGCACCCAGTAGCACATGCTGAGTCACAGGTGTGACAGCTGCATTTCA
[A,T]
ACAAGCCTGAGAAGGAGAAAGAAAGCCCTTCAGTGTGTCCTGTGTGGTTGCGAGGAGCCACT
CACGGACTCCACCTTGTGAACACAGCGGCACAGGACGCAACACAGGCCTAACCCATGCAG

FIGURE 3-57

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            GATGCTGGACTCGTTCCCTTATTCACTACCTCCTCTCTCTCCTTTTTCATGGCTTCCTTG
            CCCCAACATCCCAAACACACAGTGTGGTTTTTGATTCTTGGCTCTTCTCTGCTGCAGTTG
            ACTCCAGCTCTGCCTGTTTGTTCCTTCCTTTTTCTCCATCCCTGGCTCTCTGCCTTTTGG

126266      TTGCGAGGAGCCACTCACGGACTCCACCTTGTGAACACAGCGGCACAGGACGCAACACAG
            GCCTAACCCATGCAGGATGCTGGACTCGTTCCCTTATTCACTACCTCCTCTCTCTCCTTT
            TTCATGGCTTCCTTGCCCCAACATCCCAAACACACAGTGTGGTTTTTGATTCTTGGCTCT
            TCTCTGCTGCAGTTGACTCCAGCTCTGCCTGTTTGTTCCTTCCTTTTTCTCCATCCCTGG
            CTCTCTGCCTTTTGGCCCATCCTTTAAGGCTTGGAATGCTCCTGGGCTTACCTTCTTTCC
            [A,G]
            TTCATTGGTGGTGTGTTTTCTCAGACATACCTGCTCCCTGCTTTCATCTTTCAACTTCTT
            GGGGCTGTGACAACTCTTCCCTCTTTGTCCCCTGGAAGCCAGTTCTGAGTAGCAGCCAGG
            CCTAGAACACTGGTGACACAGACACACTTCATAGCCCTCCCGCATGGTCTAGTTTCAGAT
            CATGGTAATCCCTAGTCTAGGAGGCTGCCGAGCCCAAGAGCACAGGCTCTGGAGTGAGAA
            GCCAGTTCACCCCAGTTCTACCACCAACTTGAGAATCAGCAGAGGGCTGTGGTGAGGATT

128258      TGATCAGAGGCTCCGTACTCAGTCTCATCTAGACTGTGGCACTGGGTGTGAACGTATCAA
            ATGCATGTTTCTCCATCAGGCAGAAGTGAGAGTAACCATGTGCCATGGAGAAGGTTGACA
            GACTCCCTGTGAAGCACTTCGAAGTGACACTGGCCTCTGTGTGCTTCAGAAGAATCCAGC
            CACCTGCTGTGTGGCCTGACATTTTCCTTTAGTTTGTGATGGGCCAGCAGAACTCTGTTG
            CCAACTGTTTCTGTCCTGGGTGCCTAGCCAGAGGTTCTGAAAGTCTGGAGACTTTATAT
            [G,T]
            GGCTAAACTTTAGGAACGTCAATTACATGTCTATCTCCAAGATGCCTTCTTTTATTCAGG
            TGCAGCTCATTGTTCCTCTTGAGCTACACTTAAGATTCTTGAGCAAAACCTAAACTGAC
            ATTTCTCCAGCAATGCTCTCCTTGAGATAGAAATGGGAAAAGTAAGAGCAAAAGGAATCT
            TTTGTTCTCATGTGCATACACTAACTCATAGAAGGTTAATACTTCTATAGCCTGTACTAT
            TATAACAAGTATTATATATTTATGATATATTTCCTTAAAGAAAACAAAAGCAATATAGAC

130303      TTTATCTCCTTTTATGTTTGTACATAGAATAAAAATGTTTCTATTGTTAAGAATATTAGA
            GTTGGACGCAGTGGCTCACGCCTATAATCCCAGCACTTTGGGAGGCCAAAGCAAGTAGTT
            TGTTTGAGCCCGGGAGTTCAAGAATGGCCTGGGCAACATAGTAAGACCCCATCTCTACAA
            AAAATAAAAAATTAGCCGGGCATAGTGGCATGTCCCAGCTACTTGGGAGACTAAAGTGGG
            AGGATCACTTTGAGCCCAGGAGGTTGAGGCTGCAGTGAGCTATGATCGCACCACTGCATT
            [C,A]
            CAGCCTGGGCAACAAAGTGAGACCCTGTTTCAAAAAATAAAAAATTGGGGTTTATCTACTTA
            GATTTTCAATAAAAATTACTACTTAAATCTTTACCTGCTTGTTAATTTCAAACCCTTTTC
            TACATTTTGATTTATCTTTAAATCTCTTTTTGTCTCAATAAATGGGAAGTATCAGGAAGT
            CTTTTTACTTGCTCAAGGTCATAGAGAGCTTAGAACCTGGTAGTGTCCCTCTGAGCCCCA
            GTTCTTTCCAACCTGCCAGGCTGTAGGCCCAACAATTACTCACCACTAAGAAATTATGCT

130617      AAAGTGAGACCTGTTTCAAAAATAAAAAATTGGGGTTTATCTACTTAGATTTTCAATAAA
            AATTACTACTTAAATCTTTACCTGCTTGTTAATTTCAAACCCTTTTCTACATTTTGATTT
            ATCTTTAAATCTCTTTTTGTCTCAATAAATGGGAAGTATCAGGAAGTCTTTTTACTTGCT
            CAAGGTCATAGAGAGCTTAGAACCTGGTAGTGTCCCTCTGAGCCCCAGTTCTTTCCAACC
            TGCCAGGCTGTAGGCCCAACAATTACTCACCACTAAGAAATTATGCTTGTGCTGTCATGG
            [C,A]
            AGTTGCATTGGAGAAAAGGATATTTAACTGGCAAACAAAAGTCAGGAGAATGGGGAGATT
            TTGTTCTTTTGAAATGCTAGTGTGAAGTGCTAGGCTTATTTTTCAAATGCCCAACTCGTA
            TTCTTTTCTTTTCTTTTTTTTTTGAGAGGGAGTCTCACACTGTCGCCCAGGCTGGAGTGC
            AGTGGGGCGATCTCGGCTCACTGCAAGCTCCGCCTGCTGGGTTGACGCCATTCTCCTGCC
            TCAGCCTCCGAGTAACTGGGACTACAGGCGCCCACCACCACGCCCGGCTAACTTTTTTTT

130910      GTCATGGCAGTTGCATTGGAGAAAAGGATATTTAACTGGCAAACAAAAGTCAGGAGAATG
            GGGAGATTTTGTTCTTTTGAAATGCTAGTGTGAAGTGCTAGGCTTATTTTTCAAATGCCC
            AACTCGTATTCTTTTCTTTTCTTTTTTTTTTTTGAGAGGGAGTCTCACACTGTCGCCCAGGC
            TGGAGTGCAGTGGGGCGATCTCGGCTCACTGCAAGCTCCGCCTGCTGGGTTGACGCCATT
            CTCCTGCCTCAGCCTCCGAGTAACTGGGACTACAGGCGCCCACCACCACGCCCGGCTAAC
            [-,T]
            TTTTTTTTTTTTTTTTGTATTTTTAGTAGAGACGGGGTTTCACCGTGTTAGCCAGGATGAT
            CTTGATCTCCTGACCTCGTGATCCGCCCTCCTCAGCCTCCCAAACTGCTGGGATTACAGG
            CGTGAGCCACCGCGCCCAGCCGGCCAACTCGTATTCCTAAACGAATCATAATTTTACCAT
            AAGACCATAGTTTAGTGATTGAAGAAAAAATGTACCGAACTGTATGATATGATGGTGTCA
            AAAAGAACTAACCCAATATGAAACAGTTTTCAGGAGCATGTTTCCTATTTTGGTGTCAGT

131727      TCCTCCCTAGCCTGACTGCTATTGGAGGGCACCCTCCAGGCACAGTTCTGTTCACAGCCT
            GCTGCTGCCCCCGTGGGCCATGGTTCCAGGACGGCTCCATCTTCTGTGCTTTGGGCACAT
            TAACCTCTCCCAGCGTCACTATCTTCATCAGCAAAATGGAGATAACATTAGTACCACCTC
            ATAAAGTTGTTATGAGGATCACCAGTGAGATAATCAATCTAAAGTGCTTACAACAATGCT
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FIGURE 3-58

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TGGCACTTGGTAAACACTAAATAAATGATAGTTGCTATTATATGCATACTTTTAAAAAAC
[C,T]
TGATGCTTTTAAAAATTTTTTTCTGCTGACTAGTGAATTGTTCAGTTTTTGTTGTTGTTGT
TGTTGTTGTTGTTGTTTGAGACGGAGTCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTGGC
ATGATCTCGGCTCACTGCAAGCTCCACCCCCCGGATTCACGCCATTCTCCTGCCTTAGCC
TCCCGAGTAGCTGGGATTACAGGCGCCGGCCACCACGCCCGGCTAATTTTTTTGTATTTT
TAGTAAAGACGGGGTTTCACCTTGTTAGCCAGGATGGTCTCGATCTCCCGACCTCATGAT
```

132895
```
CAGGCTGGGAGGGAAATTAAATATATAAAAAGTCATTTTCGGCCAGGCGCTGTGGCTCAT
GCCTGTAATCCCAGCACTTTGGGAGGCCGGGCAGGTGGATCACTTGAGGTCAGGAGTTCA
AGACCAGCCTGCCCAACATGGGGAAGCCCCATCTCTACTAAAAATACAAAAATTAGCTGG
ACTTTGTGGTGCTTGCCTGTAGTCCCAGCTACTCAGGAGGCTTAGGCAGAAGAATTGCTT
GAACCTGGGAAGCGGAGGTTGTAATGAGCTGAGATCACACCACTGCACTCCAGCCTGGGC
[G,A]
ACAGAGACAGACTCCAGCTCAAAAACAATACGTTTTTTTTAATCTTGTCCCTTAATGGAAA
TATTGAGAAAATGTCTAGGGGAACTCGAAGGAGATGATTATAGGAGTTGATTATGTATGT
AAAATCAAAGTGAATGAGGCAGTGGCAGGGGGGAAAGGGGGGAACCAGTAATGACTTAGAA
GTCCTAAGCATGTTGCATGGTAATTGTGACATTTGCTTCCTGCGAGCGGAGCTGACCTTG
TGGTGTCCGTCCTAGGTACTCTCCTTTTTCTTCATTGGTCTGATGTCCATGATGATTCCT
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133506
```
TCTTTGGGGCCCTCATTGCTGTGTGCCTCATCATGGGTCTCTTCGATGGATGCTTCATTT
CCATTATGGCTCCCATAGCCTTTGAGTTAGTTGGTGCCCAGGATGTCTCCCAAGCAATTG
GATTTCTGCTCGGATTCATGTCTATACCCATGACTGTTGGCCCACCCATTGCAGGTAAAT
ATAATGATTCTCCCAGTAGTTATATTAATTCATAGTATTTTCTACTTCAGGTCTTAATTAA
GTCTCATTTATATGTAAAACATATTACAGGTTATTGATTACTGGTCTTTTGCTTTTATGT
[G,A]
TGCCTTACTGGTAACATTTTTAATAAGACTAGCTATTAAACAGTATGTTGAATTTGCTGA
AGAGTCCCTCTTATCCTTACTGGCAGCTAAAACACTATATAAAACACTTTGGGAGGCTGA
GGCGGGAAGATCACCTGAGCTCAGGAGCTTGAGACCAGCCTGGACAACATAGTGAGACAC
TATCTCTACAAAAAATAAAAAATAAAAAAATTAGCCAGGCGTGGTGGCATGCATCTGCAG
TCCCAGATGCACAGGAGGCTGAGGTGGGGGGATTGCTTGAGCCCAGAGGTCAAGGCTGCA
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135473
```
ACACCACCACACAGCAACTGGCAGCAGAAAGCTGCTGGCTCACCAGGAGGCTCTGAGGGC
ATCATAGTATTACAGCAGAACATAATCATGAGTGTTCATAAGGAGGAAGAGTTCAGGAAT
GGTCTGATTCCAAAGATAGAAAACTTGTGCATTTACAGATATTGTCTATTTTATATATGC
AGAATGGATGTACACATTTTTATGTGTTGGTACTTAATTGGACAAATGGTCAGCTATTTA
TTTAACAATGTCAGATAGATATTTAGTACAGTATATTCCCTGGACATTTTAGATAACTTA
[G,A]
GTTTTATAGTATAAGTTATAAGAGTTTAAAAACACTAAGATAACTTTTAAAACCATGAGT
CCTGGAATTTGTTAGAGAAATTAGAAATGTTGAGTACCGTAAAAGTTTTCAGAAGCAGAA
CCCGAATATAGAATGCCATTAATAATTCTTATATACTTACATTTTTCTTCCAGGTACTTAT
AAACCTTAGTCTATTTCCAAAATGTATTTAACAACCTAACTTTCATCCAAATTATTAAAT
TTAAAATTTTTCTTAATTTTTGAATTATGATGTTAAATAGTTTTCATGTTATTTCATAAAA
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136201
```
GACAAAACCCCATCTCTACAAAAAATATAAAAATTAGCCAGGCATGGTAGCATGCACCTG
TAGTCCCAGCTACTCAAGAGGCTGAGCTGGGAGGATCAATTGAGCTTGGGAAGTCAAGGC
CTGCATGAGCCATGATTATGCTACCGCACTCCAGCCTGGGTGACACAGTGAGACCCTGTC
TCAAAAAAAAAAAAAAACGTCTACCTTTCTATCTTTTCAAGTAATGTCTTGGTATGAAAATC
CAGAGGACTGTACTTTATGACAACGTTAAAGATATGAGATCTTTTTCTTCCTATCAAAAA
[A,G]
GGTTTATATTTCAGATCTGTTTCCTAAAAAAAAAAAAAAAGTCTGATGTCTGAGATGTCTG
AATCAGTCCTGTGGCTGATCTAGACCCCCTACAGAGCCACACTTGTTCTCCCTTGGTGAC
AGCTTTTTCCCTTCTCAGGGTTACTTCGTGACAAACTGGGCTCCTATGATGTGTGGCATTCT
ACCTCGCTGGAGTCCCCTCCCCTTATTGGAGGTGCTGTGCTTTGTTTTATCCCGTGGATCC
ATAGTAAGAAGCAAAGAGAGATCAGTAAAACCACTGGAAAAGAAAAGATGGAGAAAATGT
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137080
```
TGGTATATGAAAACATGTCTGAAAGTCACATATTGTGAAAATTTGAAGCTATCTCAGTAA
AAAGCAGCTTTGGAAACTGTGAATGATCTTTAGCTTGTACAAATGTTTAAAAATACCTCA
GGCTATACTGAAAGGGTTGCAGTTTGGTTAGGAGTGGAAATATTTTGTTTGTTAATGATG
TCTTCAGTTCTGGTACCTCTGTTTTACTTTCTTATGCTCTTTGGAAACTTTTTGCAAAAT
TTAAGCCTGGGTTCTAGATAATACCAGATCTACCTAAACCTCAAGTCTATGTTAAAGTTG
[A,C]
TTTCCTGCTGTTAAATAAGCTATGATATTAAGATATTCTGACTTGCTCCAGTGTCAAGGG
ACCTTCTGGGAGCAGGTGCTAACATAGTGTTCAGAATCAATATGTGAGATGAAAAGGATC
CCCTCCAGGAGGATCCTGAGCTGTTCAGAAATCATTTAAGTTTACAGCGTTGTTCCCTTT
GCGTTTGCAGTGCGTTTTACTCAAGTAGCCAGAAACACCCCACGTTTCTGAATTTGTTTA
AACTGTAACAATAAAGTAAAATAGAATGCATGAAAGATATTCTGGCGATTGTAACTTAGA
```

FIGURE 3-59

138022   GAAAGCTCTCAGTTTGAGGACCCAAAATAAAACCAAAGTCATGCCATGACCCATACTCAT
TTACAAAAACAAGAACACTTTCCTCTATCCCTAAAATTATGCTTTAGTACTTGAGGCCTT
TAAAAGTTAGTGCTTTTGATTGTGAAGACATTCAGCAACTTACTTTGTCATACATGCAGT
TGCACCTTACCACTTCTAATAGTGTCATATTTCATATTCAGGGGACTTAGATAATTTGCC
TGTGGATGGTTCTTTTGCAGGAAAAAAAATCTACATTTTGACCATACTACCCTTTCATGT
[T,C]
CTTATTATAAGCTTTTAGAAAATGATTTCATTCAGTCATGTCCAGTTATATAAAACGTTA
CTTTCTCATTTTTGAGAAGTTCAACAAAACATACTACTAAGACCAATCATCAAACCCACT
ATTATAAATGTTAATTTTTGGCTGGGTAAGGTGGCTTGCGCCTATAATCCCAGCACTTTGG
GAGGCTGAGGAGGGAAGATTGCTTGAGCCCAGGAGTTTGAGACCAGCCTGGGCAACATAG
CAAGATCCTGTCTCTACTAAAAATAAAAAAAAAAAAATTAGGCCAAGCATAGTGGCTCATGC

138543   GACCAGCCTGGGCAACATAGCAAGATCCTGTCTCTACTAAAAATAAAAAAAAAAAATTAGG
CCAAGCATAGTGGCTCATGCCTGTAATCCTAGCACTTTGGTAGTCCAAGGCAGGGGGATC
ACTTGAGCCCAGAAGTTCAAGACCAGCTTGGGTAACATAATGAGACCCTGTGTCTACAA
AAATTTAAAAATTAGCCAGGCATGATGGTGCCCACCTGTAGCCCCAGCTACTCAGAGGCT
GAGGTAGTGGAAGGATTGCTTGAGCCTAAGAGATGGAGGCTGCAGTGAGCTATGCCACTG
[A,T]
ACTCTAGCCTGTTCAACTGAGCAGAACCCTGTCTGTAAAAGAAAATCAAAAACAAAAAAT
AAATGTTAAATTTTGTTTTAAGTTTTAGCACAGACTCCCCTCAAAACACCTTCTCCCCAA
TTTTACAGAAAGTAATTCAAAAATGAAAACTTTACTCTGTAAAGACCTCTACAGTGTTTT
TCTTTTTCAAAATTTGGCTGATTTTAGGAAAAAAGTGATCATCTGAAACTAAAAGAAATTG
CTTGGTTAGTTTCCATATTAAAACAGCAGTGACAAGTATATATAACTTAGATCTCAGCAT

138681   AAGACCAGCTTGGGTAACATAATGAGACCCTGTGTCTACAAAAAATTTAAAAATTAGCCA
GGCATGATGGTGCCCACCTGTAGCCCCAGCTACTCAGAGGCTGAGGTAGTGGAAGGATTG
CTTGAGCCTAAGAGATGGAGGCTGCAGTGAGCTATGCCACTGTACTCTAGCCTGTTCAAC
TGAGCAGAACCCTGTCTGTAAAAGAAAATCAAAAACAAAAAATAAATGTTAAATTTTGTT
TTAAGTTTTAGCACAGACTCCCCTCAAAACACCTTCTCCCCAATTTTTACAGAAAGTAATT
[C,T,G,A]
AAAAATGAAAACTTTACTCTGTAAAGACCTCTACAGTGTTTTTCTTTTCAAAATTTGGCT
GATTTTAGGAAAAAAGTGATCATCTGAAACTAAAAGAAATTGCTTGGTTAGTTTCCATAT
TAAAACAGCAGTGACAAGTATATATAACTTAGATCTCAGCATATGTGTTTGTATATTAAA
CTTCACATATGTAGTTTTTCAGTTTAATGGAATGAATCAAACTGGATCTATAACACTGAAA
AAGTTCTATTGTAATAGACTCATACGGAGAATACTCTGCTATAATAATATAAAATTAAGA

FIGURE 3-60